QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2020

Invitae Corporation
(Exact name of the registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

1400 16th Street, San Francisco, California 94103
(Address of principal executive offices, Zip Code)

(415) 374-7782
(Registrant’s telephone number, including area code)

131,785,131
(The number of shares of the registrant’s common stock outstanding as of July 31, 2020 was 131,785,131.)
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PART I — Financial Information


INVITAE CORPORATION

Condensed Consolidated Balance Sheets
(in thousands)
(unaudited)

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<tr>
<th></th>
<th>June 30, 2020</th>
<th>December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current assets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$168,203</td>
<td>$151,389</td>
</tr>
<tr>
<td>Marketable securities</td>
<td>253,933</td>
<td>240,436</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>27,905</td>
<td>32,541</td>
</tr>
<tr>
<td>Prepaid expenses and other current assets</td>
<td>21,081</td>
<td>18,032</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>471,122</td>
<td>442,398</td>
</tr>
<tr>
<td>Property and equipment, net</td>
<td>43,381</td>
<td>37,747</td>
</tr>
<tr>
<td>Operating lease assets</td>
<td>38,239</td>
<td>36,640</td>
</tr>
<tr>
<td>Restricted cash</td>
<td>6,343</td>
<td>6,183</td>
</tr>
<tr>
<td>Intangible assets, net</td>
<td>192,644</td>
<td>125,175</td>
</tr>
<tr>
<td>Goodwill</td>
<td>211,225</td>
<td>126,777</td>
</tr>
<tr>
<td>Other assets</td>
<td>6,921</td>
<td>6,681</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$969,875</td>
<td>$781,601</td>
</tr>
<tr>
<td><strong>Liabilities and stockholders’ equity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current liabilities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$20,091</td>
<td>$10,321</td>
</tr>
<tr>
<td>Accrued liabilities</td>
<td>99,490</td>
<td>64,814</td>
</tr>
<tr>
<td>Operating lease obligations</td>
<td>6,339</td>
<td>4,870</td>
</tr>
<tr>
<td>Finance lease obligations</td>
<td>977</td>
<td>1,855</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td>126,897</td>
<td>81,860</td>
</tr>
<tr>
<td>Operating lease obligations, net of current portion</td>
<td>42,134</td>
<td>42,191</td>
</tr>
<tr>
<td>Finance lease obligations, net of current portion</td>
<td>879</td>
<td>1,155</td>
</tr>
<tr>
<td>Convertible senior notes, net</td>
<td>276,092</td>
<td>268,755</td>
</tr>
<tr>
<td>Deferred tax liability</td>
<td>10,250</td>
<td>—</td>
</tr>
<tr>
<td>Other long-term liabilities</td>
<td>49,428</td>
<td>8,000</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>505,680</td>
<td>401,961</td>
</tr>
<tr>
<td><strong>Commitments and contingencies (Note 8)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stockholders’ equity:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common stock</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>Accumulated other comprehensive income (loss)</td>
<td>572</td>
<td>(9)</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>1,487,217</td>
<td>1,138,316</td>
</tr>
<tr>
<td>Accumulated deficit</td>
<td>(1,023,607)</td>
<td>(758,677)</td>
</tr>
<tr>
<td><strong>Total stockholders’ equity</strong></td>
<td>464,195</td>
<td>379,640</td>
</tr>
<tr>
<td><strong>Total liabilities and stockholders’ equity</strong></td>
<td>$969,875</td>
<td>$781,601</td>
</tr>
</tbody>
</table>

See accompanying notes to unaudited condensed consolidated financial statements.
<table>
<thead>
<tr>
<th></th>
<th>Three Months Ended</th>
<th>Six Months Ended</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>June 30, 2020</td>
<td>June 30, 2019</td>
<td>2020</td>
<td>2019</td>
</tr>
<tr>
<td><strong>Revenue:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test revenue</td>
<td>$45,099</td>
<td>$52,302</td>
<td>$108,177</td>
<td>$91,921</td>
</tr>
<tr>
<td>Other revenue</td>
<td>1,092</td>
<td>1,173</td>
<td>2,262</td>
<td>2,107</td>
</tr>
<tr>
<td>Total revenue</td>
<td>46,191</td>
<td>53,475</td>
<td>110,439</td>
<td>94,028</td>
</tr>
<tr>
<td><strong>Cost of revenue:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research and development</td>
<td>74,963</td>
<td>25,302</td>
<td>130,631</td>
<td>43,296</td>
</tr>
<tr>
<td>Selling and marketing</td>
<td>39,520</td>
<td>30,779</td>
<td>81,640</td>
<td>54,972</td>
</tr>
<tr>
<td>General and administrative</td>
<td>30,838</td>
<td>21,274</td>
<td>54,660</td>
<td>34,593</td>
</tr>
<tr>
<td><strong>Loss from operations:</strong></td>
<td>(142,082)</td>
<td>(51,886)</td>
<td>(239,866)</td>
<td>(88,093)</td>
</tr>
<tr>
<td>Other income (expense), net</td>
<td>(21,436)</td>
<td>1,381</td>
<td>(16,728)</td>
<td>2,019</td>
</tr>
<tr>
<td>Interest expense</td>
<td>(5,485)</td>
<td>(2,121)</td>
<td>(10,936)</td>
<td>(4,229)</td>
</tr>
<tr>
<td>Net loss before taxes</td>
<td>(169,003)</td>
<td>(52,626)</td>
<td>(267,530)</td>
<td>(90,303)</td>
</tr>
<tr>
<td>Income tax benefit</td>
<td>(2,600)</td>
<td>(3,950)</td>
<td>(2,600)</td>
<td>(3,950)</td>
</tr>
<tr>
<td><strong>Net loss:</strong></td>
<td>$ (166,403)</td>
<td>$ (48,676)</td>
<td>$ (264,930)</td>
<td>$ (86,353)</td>
</tr>
<tr>
<td><strong>Net loss per share, basic and diluted:</strong></td>
<td>$ (1.29)</td>
<td>$(0.54)</td>
<td>$(2.35)</td>
<td>$(1.01)</td>
</tr>
<tr>
<td>Shares used in computing net loss per share, basic and diluted</td>
<td>129,023</td>
<td>90,863</td>
<td>112,765</td>
<td>85,148</td>
</tr>
</tbody>
</table>

See accompanying notes to unaudited condensed consolidated financial statements.
## Condensed Consolidated Statements of Comprehensive Loss

*(in thousands)*

*(unaudited)*

<table>
<thead>
<tr>
<th></th>
<th>Three Months Ended June 30,</th>
<th></th>
<th>Six Months Ended June 30,</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2019</td>
<td>2020</td>
<td>2019</td>
</tr>
<tr>
<td>Net loss</td>
<td>$ (166,403)</td>
<td>$ (48,676)</td>
<td>$ (264,930)</td>
<td>$ (86,353)</td>
</tr>
<tr>
<td>Other comprehensive income:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unrealized income (loss) on available-for-sale marketable securities, net of tax</td>
<td>(722)</td>
<td>(8)</td>
<td>581</td>
<td>5</td>
</tr>
<tr>
<td>Comprehensive loss</td>
<td>$ (167,125)</td>
<td>$ (48,684)</td>
<td>$ (264,349)</td>
<td>$ (86,348)</td>
</tr>
</tbody>
</table>

See accompanying notes to unaudited condensed consolidated financial statements.
INVITAE CORPORATION
Condensed Consolidated Statements of Stockholders’ Equity
(in thousands)
(unaudited)

<table>
<thead>
<tr>
<th></th>
<th>Three Months Ended June 30,</th>
<th></th>
<th>Six Months Ended June 30,</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2019</td>
<td>2020</td>
<td>2019</td>
</tr>
<tr>
<td>Common stock:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance, beginning of period</td>
<td>$10</td>
<td>$9</td>
<td>$10</td>
<td>$8</td>
</tr>
<tr>
<td>Common stock issued</td>
<td>3</td>
<td>—</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Balance, end of period</td>
<td>13</td>
<td>9</td>
<td>13</td>
<td>9</td>
</tr>
</tbody>
</table>

|                      |                             |     |                          |     |
|                      | Accumulated other comprehensive income (loss): |     |                          |     |
| Balance, beginning of period | 1,294 | 8  | (9)                      | (5) |
| Unrealized income (loss) on available-for-sale marketable securities, net of tax | (722) | (8) | 581                      | 5   |
| Balance, end of period | 572                         | —    | 572                      | —    |

|                      |                             |     |                          |     |
|                      | Additional paid-in capital: |     |                          |     |
| Balance, beginning of period | 1,182,033 | 870,784 | 1,138,316 | 678,548 |
| Common stock issued in connection with public offering, net | 217,486 | —    | 217,486 | 184,490 |
| Common stock issued on exercise of stock options, net | 1,026 | 413  | 2,171 | 2,432 |
| Common stock issued pursuant to exercises of warrants | 35    | 25   | 62    | 113   |
| Common stock issued pursuant to employee stock purchase plan | 4,527 | 2,578 | 4,527 | 2,578 |
| Common stock issued or issuable pursuant to business combinations | 60,053 | 59,026 | 102,506 | 59,442 |
| Stock-based compensation expense | 22,057 | 11,733 | 32,536 | 16,956 |
| Reclassification of stock payable liabilities | —    | —    | (10,387) | —    |
| Balance, end of period | 1,487,217 | 944,559 | 1,487,217 | 944,559 |

|                      |                             |     |                          |     |
|                      | Accumulated deficit:        |     |                          |     |
| Balance, beginning of period | (857,204) | (554,389) | (758,677) | (516,712) |
| Net loss             | (166,403) | (48,676) | (264,930) | (86,353) |
| Balance, end of period | (1,023,607) | (603,065) | (1,023,607) | (603,065) |
| Total stockholders’ equity | $464,195 | $341,503 | $464,195 | $341,503 |

See accompanying notes to unaudited condensed consolidated financial statements.
## Condensed Consolidated Statements of Cash Flows

(in thousands)  
(unaudited)

<table>
<thead>
<tr>
<th></th>
<th>Six Months Ended June 30,</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2019</td>
</tr>
<tr>
<td><strong>Cash flows from operating activities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net loss</td>
<td>$(264,930)</td>
<td>$(86,353)</td>
</tr>
<tr>
<td>Adjustments to reconcile net loss to net cash</td>
<td></td>
<td></td>
</tr>
<tr>
<td>used in operating activities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>14,500</td>
<td>6,725</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>81,124</td>
<td>19,540</td>
</tr>
<tr>
<td>Amortization of debt discount and issuance costs</td>
<td>7,337</td>
<td>—</td>
</tr>
<tr>
<td>Remeasurements of liabilities associated with</td>
<td>26,749</td>
<td>(286)</td>
</tr>
<tr>
<td>business combinations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefit from income taxes</td>
<td>(2,600)</td>
<td>(3,950)</td>
</tr>
<tr>
<td>Other</td>
<td>(536)</td>
<td>1,182</td>
</tr>
<tr>
<td>Changes in operating assets and liabilities,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>net of businesses acquired:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>4,939</td>
<td>3,153</td>
</tr>
<tr>
<td>Prepaid expenses and other current assets</td>
<td>(3,049)</td>
<td>(3,825)</td>
</tr>
<tr>
<td>Other assets</td>
<td>942</td>
<td>2,410</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>9,185</td>
<td>(3,954)</td>
</tr>
<tr>
<td>Accrued expenses and other liabilities</td>
<td>3,585</td>
<td>4,267</td>
</tr>
<tr>
<td><strong>Net cash used in operating activities:</strong></td>
<td>(122,754)</td>
<td>(61,091)</td>
</tr>
<tr>
<td><strong>Cash flows from investing activities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases of marketable securities</td>
<td>(115,350)</td>
<td>(20,781)</td>
</tr>
<tr>
<td>Proceeds from sales of marketable securities</td>
<td>12,532</td>
<td>—</td>
</tr>
<tr>
<td>Proceeds from maturities of marketable securities</td>
<td>89,965</td>
<td>34,000</td>
</tr>
<tr>
<td>Acquisition of businesses, net of cash acquired</td>
<td>(57,576)</td>
<td>3,193</td>
</tr>
<tr>
<td>Purchases of property and equipment</td>
<td>(10,854)</td>
<td>(8,824)</td>
</tr>
<tr>
<td>Other</td>
<td>(1,334)</td>
<td>—</td>
</tr>
<tr>
<td>**Net cash provided by (used in) investing</td>
<td>(82,617)</td>
<td>7,588</td>
</tr>
<tr>
<td>activities**</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cash flows from financing activities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from public offerings of common stock,</td>
<td>217,489</td>
<td>184,490</td>
</tr>
<tr>
<td>net</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from issuance of common stock, net</td>
<td>6,760</td>
<td>5,123</td>
</tr>
<tr>
<td>Finance lease principal payments</td>
<td>(1,154)</td>
<td>(1,031)</td>
</tr>
<tr>
<td>Other</td>
<td>(750)</td>
<td>—</td>
</tr>
<tr>
<td><strong>Net cash provided by financing activities</strong></td>
<td>222,345</td>
<td>188,582</td>
</tr>
<tr>
<td>**Net increase in cash, cash equivalents and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>restricted cash**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16,974</td>
<td>135,079</td>
</tr>
<tr>
<td><strong>Cash, cash equivalents and restricted cash at</strong></td>
<td>157,572</td>
<td>118,164</td>
</tr>
<tr>
<td>beginning of period**</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cash, cash equivalents and restricted cash at</strong></td>
<td>$ 174,546</td>
<td>$ 253,243</td>
</tr>
<tr>
<td>end of period**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Supplemental cash flow information of non-cash investing and financing activities:

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchases of property and equipment in accounts payable and</td>
<td>$1,570</td>
<td>$1,059</td>
</tr>
<tr>
<td>accrued liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common stock issued for acquisition of businesses</td>
<td>$75,682</td>
<td>$59,442</td>
</tr>
<tr>
<td>Consideration payable for acquisition of businesses</td>
<td>$16,813</td>
<td>—</td>
</tr>
<tr>
<td>Operating lease assets obtained in exchange for lease obligations, net</td>
<td>$4,046</td>
<td>$5,615</td>
</tr>
</tbody>
</table>

See accompanying notes to unaudited condensed consolidated financial statements.
1. Organization and description of business

Invitae Corporation ("Invitae," "the Company," "we," "us," and "our") was incorporated in the State of Delaware on January 13, 2010, as Locus Development, Inc. and changed its name to Invitae Corporation in 2012. We utilize an integrated portfolio of laboratory processes, software tools and informatics capabilities to process DNA-containing samples, analyze information about patient-specific genetic variation and generate test reports for clinicians and patients. Our main production facility is located in San Francisco, California. We currently have more than 20,000 genes in production and provide a variety of diagnostic tests that can be used in multiple indications. We offer genetic testing across multiple clinical areas, including hereditary cancer, cardiology, neurology, pediatrics, metabolic conditions and rare diseases. To augment our offering and realize our mission, we acquired multiple assets including four businesses in 2017, which expanded our suite of genome management offerings and expanded our offering in reproductive health. In the first quarter of 2019, we introduced our non-invasive prenatal screen ("NIPS"). In June 2019, we launched a direct channel to consumers to increase accessibility to our testing platform. To improve our technology stack and reduce costs associated with variant interpretation, we acquired Singular Bio, Inc. ("Singular Bio") in June 2019, Jungla Inc. ("Jungla") in July 2019, and Oracle BV operating under the name "Diploid" in March 2020. To further expand our ability to scale and improve customer experience with patient support telehealth solutions and the use of chatbots, we acquired Clear Genetics, Inc. ("Clear Genetics") in November 2019. In April 2020, we acquired YouScript Incorporated ("YouScript") and Genelex Solutions, LLC ("Genelex") to expand content and improve customer experience by bringing pharmacogenetic testing and integrated clinical decision support to Invitae. In order to expand content and increase access to personalized oncology, we entered into a definitive agreement to acquire ArcherDX, Inc. ("ArcherDX") in June 2020 which we expect to close in the next few months, with a view towards integrating Invitae’s germline testing with ArcherDX’s tumor profiling and liquid biopsy technology and services into a single platform to enable precision medicine approaches from diagnostic testing to therapy optimization and monitoring. Invitae operates in one segment.

Basis of presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP") for interim financial information and in accordance with the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the annual financial statements. In the opinion of management, the accompanying unaudited condensed consolidated financial statements reflect all adjustments (consisting only of normal recurring adjustments) considered necessary for a fair presentation. The information included in this Quarterly Report on Form 10-Q should be read in conjunction with the audited financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2019. The results for the three and six months ended June 30, 2020 are not necessarily indicative of the results expected for the full fiscal year or any other periods.

2. Summary of significant accounting policies

Principles of consolidation

Our unaudited condensed consolidated financial statements include our accounts and the accounts of our wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make judgments, estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities as of the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. We base these estimates on current facts, historical and anticipated results, trends and various other assumptions that we believe are reasonable under the circumstances, including assumptions as to future events. Actual results could differ materially from those judgments, estimates and assumptions. We evaluate our estimates on an ongoing basis.
Concentrations of credit risk and other risks and uncertainties

Financial instruments that potentially subject us to a concentration of credit risk consist of cash, cash equivalents, marketable securities and accounts receivable. Our cash and cash equivalents are held by financial institutions in the United States. Such deposits may exceed federally insured limits.

Significant customers are those that represent 10% or more of our total revenue presented on the consolidated statements of operations. Our revenue from significant customers as a percentage of our total revenue was as follows:

<table>
<thead>
<tr>
<th></th>
<th>Three Months Ended June 30,</th>
<th>Six Months Ended June 30,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2019</td>
</tr>
<tr>
<td>Medicare</td>
<td>20%</td>
<td>23%</td>
</tr>
<tr>
<td>United Healthcare</td>
<td>*</td>
<td>10%</td>
</tr>
</tbody>
</table>

* Balance represents less than 10% of total revenue

Cash, cash equivalents and restricted cash

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the consolidated balance sheets that sum to the total of the same amounts shown in the statements of cash flows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>June 30, 2020</th>
<th>December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>$ 168,203</td>
<td>$ 151,389</td>
</tr>
<tr>
<td>Restricted cash</td>
<td>6,343</td>
<td>6,183</td>
</tr>
<tr>
<td>Total cash, cash equivalents and restricted cash</td>
<td>$ 174,546</td>
<td>$ 157,572</td>
</tr>
</tbody>
</table>

Inventory

We maintain test reagents and other consumables primarily used in sample collection kits which are valued at the lower of cost or net realizable value. Cost is determined using actual costs on a first-in, first-out basis. Our inventory was $11.1 million and $6.6 million as of June 30, 2020 and December 31, 2019, respectively, and was recorded in prepaid expenses and other current assets on our consolidated balance sheets. While we have not experienced significant disruption in our supply chain and we do not yet know the full impact COVID-19 will have on our supply chain, we have increased our inventory on hand to respond to potential future disruptions that may occur.

Fair value of financial instruments

Our financial instruments consist principally of cash and cash equivalents, marketable securities, accounts payable, accrued liabilities, finance leases and liabilities associated with business combinations. The carrying amounts of certain of these financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and accrued and other current liabilities approximate their current fair value due to the relatively short-term nature of these accounts. Based on borrowing rates available to us, the carrying value of our finance leases approximate their fair values. Liabilities associated with business combinations are recorded at their estimated fair value.

Prior period reclassifications

We have reclassified certain amounts in prior periods to conform with current presentation.

Immaterial correction of an error

We determined the historical classification of certain acquisition-related obligations as equity and the subsequent measurement of such obligations was inappropriate and instead should have been classified as liabilities and subsequently measured at fair value with changes recognized in other income (expense), net during the three months ended March 31, 2020. We determined that the impact of the error to previously issued financial statements was not material and have corrected the immaterial error in the three months ended March 31, 2020. The impact of this correction was an increase to other long-term liabilities of $10.1 million, a corresponding decrease to additional paid-in capital of $10.4 million and an increase to other income, net of $0.3 million.
Recent accounting pronouncements

We evaluate all Accounting Standards Updates ("ASUs") issued by the Financial Accounting Standards Board ("FASB") for consideration of their applicability. ASUs not included in the disclosures in this report were assessed and determined to be either not applicable or are not expected to have a material impact on our consolidated financial statements.

Recently adopted accounting pronouncements

In June 2016, FASB issued ASU 2016-13, Financial Instruments-Credit Losses (Topic 326), which requires measurement and recognition of expected credit losses for financial assets. This guidance became effective for us beginning in the first quarter of 2020 and was adopted using a modified retrospective approach, with certain exceptions. The adoption of Topic 326 did not have a material impact on our consolidated financial statements as credit losses are not expected to be significant.

As part of our adoption of Topic 326, we assess our accounts receivables for expected credit losses at each reporting period by disaggregating by payer type and further by portfolios of customers with similar characteristics, such as customer type and geographic location. We then review each portfolio for expected credit losses based on historical payment trends as well as forward looking data and current economic trends. If a credit loss is determined, we record a reduction to our accounts receivable balance with a corresponding general and administrative expense.

In accordance with Topic 326, we no longer evaluate whether our available-for-sale debt securities in an unrealized loss position are other than temporarily impaired. Instead, we assess whether such unrealized loss positions are credit-related. Our expected loss allowance methodology for these securities is developed by reviewing the extent of the unrealized loss, the issuers’ credit ratings and any changes in those ratings, as well as reviewing current and future economic market conditions and the issuers’ current status and financial condition. The credit-related portion of unrealized losses, and any subsequent improvements, are recorded in interest income through an allowance account. Unrealized gains and losses that are not credit-related are included in accumulated other comprehensive income (loss).

3. Revenue, accounts receivable and deferred revenue

Test revenue is generated from sales of diagnostic tests to three groups of customers: institutions, such as hospitals, clinics and partners; patients who pay directly; and patients’ insurance carriers. Amounts billed and collected, and the timing of collections, vary based on whether the payer is an institution, a patient or an insurance carrier. Other revenue consists principally of revenue recognized under collaboration and genome network agreements and is accounted for under the provisions provided in ASC 606, Revenue from Contracts with Customers.

The following table includes our revenues as disaggregated by payer category (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Three Months Ended June 30,</th>
<th>Six Months Ended June 30,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2019</td>
</tr>
<tr>
<td>Test revenue:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutions</td>
<td>$ 9,531</td>
<td>$ 9,814</td>
</tr>
<tr>
<td>Patient - direct</td>
<td>4,298</td>
<td>4,056</td>
</tr>
<tr>
<td>Patient - insurance</td>
<td>31,270</td>
<td>38,432</td>
</tr>
<tr>
<td>Total test revenue</td>
<td>45,099</td>
<td>52,302</td>
</tr>
<tr>
<td>Other revenue</td>
<td>1,092</td>
<td>1,173</td>
</tr>
<tr>
<td>Total revenue</td>
<td>$ 46,191</td>
<td>$ 53,475</td>
</tr>
</tbody>
</table>
We recognize revenue related to billings based on estimates of the amount that will ultimately be realized. Cash collections for certain diagnostic tests delivered may differ from rates originally estimated. As a result of new information, we updated our estimate of the amounts to be recognized for previously delivered tests which resulted in the following increases to revenue and decreases to our loss from operations and basic and diluted net loss per share (in millions, except per share amounts):

<table>
<thead>
<tr>
<th></th>
<th>Three Months Ended June 30,</th>
<th>Six Months Ended June 30,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2019</td>
</tr>
<tr>
<td>Revenue</td>
<td>$0.9</td>
<td>$2.4</td>
</tr>
<tr>
<td>Loss from operations</td>
<td>$(0.9)</td>
<td>$(2.4)</td>
</tr>
<tr>
<td>Net loss per share, basic and</td>
<td>$(0.01)</td>
<td>$(0.03)</td>
</tr>
</tbody>
</table>

Influence of COVID-19

Our test volumes decreased significantly in the second half of March 2020 as compared to the first few months of 2020 as a result of COVID-19 and related limitations and priorities across the healthcare system. While it is too early to predict the full impact COVID-19 will have on our business, our test volumes have increased in April, May and June 2020 from the low in March 2020, although we are currently still experiencing reduced test volumes and changes in product mix due to the impact of COVID-19. We expect COVID-19 to have a material impact on our financial results for at least the next quarter and for the foreseeable future. We have reviewed and adjusted for the impact of COVID-19 on our estimates related to revenue recognition and expected credit losses.

Approximately 8% of our workforce as of March 31, 2020 was impacted by a reduction in force in April 2020 in an initiative to manage costs and cash burn that resulted in one-time costs in the second quarter of 2020 of $3.8 million. In addition, effective May 2020, we have reduced the salaries of our named executive officers by approximately 20%.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") was signed into law which was a stimulus bill intended to bolster the economy, among other things, and provide assistance to qualifying businesses and individuals. The CARES Act included an infusion of funds into the healthcare system, and in April 2020, we received $3.8 million as a part of this initiative. This payment was recognized as other income (expense), net in our consolidated statement of operations during the three months ended June 30, 2020. At this time, we are not certain of the availability, extent or impact of any future relief provided under the CARES Act.

Accounts receivable

The majority of our accounts receivable represents amounts billed to institutions (e.g., hospitals, clinics, partners) and estimated amounts to be collected from third-party insurance payers for diagnostic test revenue recognized. Also included are amounts due under the terms of collaboration and genome network agreements for diagnostic testing and data aggregation reporting services provided and proprietary platform access rights transferred.

Deferred revenue

We record deferred revenue when cash payments are received or due in advance of our performance related to one or more performance obligations. The amounts deferred to date primarily consist of prepayments related to our consumer direct channel as well as consideration received pertaining to the estimated exercise of certain re-requisition rights. In order to comply with loss contract rules, our re-requisition rights revenue deferral is no less than the estimated cost of fulfilling related obligations. We recognize revenue related to re-requisition rights as the rights are exercised or expire unexercised, which is generally within 90 days of initial deferral.

4. Business combinations

Singular Bio

In June 2019, we acquired 100% of the fully diluted equity of Singular Bio, a privately held company developing single molecule detection technology, for approximately $57.3 million, comprised of $53.9 million in the form of 2.5 million shares of our common stock and the remainder in cash.
We granted approximately $90.0 million of restricted stock units ("RSU") under our 2015 Stock Incentive Plan as inducement awards to new employees who joined Invitae in connection with our acquisition of Singular Bio. $45.0 million of the RSUs are time-based and vest in three equal installments in December 2019, June 2020, and December 2020, subject to the employee's continued service with us ("Time-based RSUs") and $45.0 million of the RSUs are performance-based RSUs ("PRSUs") that vest upon the achievement of certain performance conditions. Since the number of awards granted is based on a 30-day volume weighted-average share price with a fixed dollar value, these Time-based RSUs and PRSUs are liability-classified and the fair value is estimated at each reporting period based on the number of shares that are expected to be issued at each reporting date and our closing stock price, which combined are categorized as Level 3 inputs. Therefore, fair value of the RSUs and PRSUs and the number of shares to be issued will not be fixed until the awards vest.

During the three and six months ended June 30, 2020, we recorded research and development stock-based compensation expense of $10.9 million and $18.5 million, respectively, related to the Time-based RSUs, and $18.9 million and $30.1 million, respectively, related to the PRSUs based on our evaluations of the probability of achieving performance conditions. As of June 30, 2020, the Time-based RSUs and PRSUs had a total fair value of $48.6 million and $54.4 million, respectively, based on a total estimated issuance of 4.4 million shares and expectation of the achievement of the performance conditions. During the three and six months ended June 30, 2020, 0.9 million of the Time-based RSUs and 0.6 million of the PRSUs vested with a total fair value of $26.8 million which was recorded in common stock issued or issuable pursuant to business combinations in the consolidated statements of stockholders' equity.

**Jungla**

In July 2019, we acquired 100% of the equity interest of Jungla, a privately held company developing a platform for molecular evidence testing in genes, for approximately $59.0 million, comprised of $44.9 million in the form of shares of our common stock and the remainder in cash. We agreed to pay a portion of the cash and issue approximately 0.2 million shares of our common stock after a 12-month period, subject to a hold back to satisfy indemnification obligations that may arise.

We may be required to pay contingent consideration based on achievement of post-closing development milestones. As of the acquisition date, the fair value of this contingent consideration was $10.7 million including cash and common stock. The milestones are expected to be completed within two years. The material factors that may impact the fair value of the contingent consideration, and therefore, this liability, are the probabilities and timing of achieving the related milestones and the discount rate we used to estimate the fair value. Significant changes in any of the probabilities of success would result in a significant change in the fair value, which will be estimated at each reporting date with changes reflected as a general and administrative expense.

As of June 30, 2020, we had a stock payable liability related to our acquisition of Jungla of $6.0 million which represents the hold-back obligation to issue 0.2 million shares subject to indemnification claims that may arise. This liability is adjusted at each reporting period based on the fair value of our common stock, which is a Level 3 input, with the change recorded in other income (expense), net. During July 2020, the hold-back shares were remitted in full to the former owners of Jungla.

**Clear Genetics**

In November 2019, we acquired 100% of the equity interest of Clear Genetics, a developer of software for providing genetic services at scale, for approximately $50.1 million. Of the cash and stock purchase price consideration issued, $0.2 million of cash and approximately 0.4 million shares of our common stock were subject to a 12-month hold back to satisfy indemnification obligations that may arise, 0.1 million of which were released during the three months ended June 30, 2020.

As of June 30, 2020, we had a stock payable liability related to our acquisition of Clear Genetics of $8.5 million which represents the hold-back obligation to issue 0.3 million shares subject to indemnification claims that may arise. This liability is adjusted at each reporting period based on the fair value of our common stock, which is a Level 3 input, with the change recorded in other income (expense), net.
In March 2020, we acquired 100% of the equity interest of Diploid, a developer of artificial intelligence software capable of diagnosing genetic disorders using sequencing data and patient information, for approximately $82.3 million in cash and shares of our common stock. Of the stock purchase price consideration issued, approximately 0.4 million shares are subject to a hold-back to satisfy indemnification obligations that may arise. We included the financial results of Diploid in our consolidated financial statements from the acquisition date, which were not material for the six months ended June 30, 2020.

The following table summarizes the purchase price recorded as a part of the acquisition of Diploid (in thousands):

<table>
<thead>
<tr>
<th>Purchase Price</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash transferred</td>
<td>$32,323</td>
</tr>
<tr>
<td>Hold-back consideration - common stock</td>
<td>7,538</td>
</tr>
<tr>
<td>Common stock transferred</td>
<td>42,453</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>82,314</strong></td>
</tr>
</tbody>
</table>

Assets acquired and liabilities assumed are recorded based on valuations derived from estimated fair value assessments and assumptions used by us. While we believe that our estimates and assumptions underlying the valuations are reasonable, different estimates and assumptions could result in different valuations assigned to the individual assets acquired and liabilities assumed, and the resulting amount of goodwill. The following table summarizes the fair values of assets acquired and liabilities assumed through our acquisition of Diploid at the date of acquisition (in thousands):

<table>
<thead>
<tr>
<th>Cash</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>26</td>
</tr>
<tr>
<td>Developed technology</td>
<td>41,789</td>
</tr>
<tr>
<td><strong>Total identifiable assets acquired</strong></td>
<td><strong>41,939</strong></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>(30)</td>
</tr>
<tr>
<td>Deferred tax liability</td>
<td>(10,250)</td>
</tr>
<tr>
<td><strong>Net identifiable assets acquired</strong></td>
<td><strong>31,659</strong></td>
</tr>
<tr>
<td>Goodwill</td>
<td>50,655</td>
</tr>
<tr>
<td><strong>Total purchase price</strong></td>
<td><strong>82,314</strong></td>
</tr>
</tbody>
</table>

Based on the guidance provided in ASC 805, *Business Combinations*, we accounted for the acquisition of Diploid as a business combination in which we determined that 1) Diploid was a business which combines inputs and processes to create outputs, and 2) substantially all of the fair value of gross assets acquired was not concentrated in a single identifiable asset or group of similar identifiable assets.

Our purchase price allocation for the acquisition is preliminary and subject to revision as additional information about fair value of assets and liabilities becomes available, primarily related to our deferred tax liability assumed in connection with the acquisition. Additional information that existed as of the acquisition date but at the time was unknown to us may become known to us during the remainder of the measurement period, a period not to exceed 12 months from the acquisition date.

We measured the identifiable assets and liabilities assumed at their acquisition date fair values separately from goodwill. The intangible asset acquired is developed technology related to Diploid's artificial intelligence technology platform. The fair value of the developed technology was estimated using an income approach with an estimated useful life of nine years. As of the acquisition date, we recorded a stock payable liability of $7.5 million to represent the hold-back obligation to issue 0.4 million shares subject to indemnification claims that may arise. This liability is adjusted at each reporting period based on the fair value of our common stock, which is a Level 3 input. As of June 30, 2020, the value of this liability was $12.8 million with the change recorded in other income (expense), net.

Goodwill represents the excess of the purchase price over the fair value of the net tangible and intangible assets acquired. The acquisition of Diploid resulted in the recognition of $50.7 million of goodwill which we believe relates primarily to expansion of the acquired technology to apply to new areas of genetic testing. Goodwill created as a result of the acquisition of Diploid is not deductible for tax purposes.
In June 2020, we granted 0.2 million RSUs with a fair value of $3.6 million under our 2015 Stock Incentive Plan as inducement awards in connection with our acquisition of Diploid. These RSUs vest in two equal installments, in April 2021 and April 2022. The value of the awards was recognized as research and development stock-based compensation upon grant in June 2020 as there were no ongoing obligations required by the award recipients.

**Genelex and YouScript**

In April 2020, we acquired 100% of the equity interest of Genelex and YouScript to bring pharmacogenetic testing and integrated clinical decision support to Invitae. We acquired Genelex for approximately $13.2 million, primarily in shares of our common stock. Of the stock purchase price consideration issued, approximately 0.1 million shares are subject to a hold-back to satisfy indemnification obligations that may arise. We acquired YouScript for approximately $52.7 million, including cash consideration of $24.5 million and the remaining in shares of our common stock. Of the purchase price consideration for YouScript, approximately $1.4 million and 0.5 million shares of our common stock are subject to a hold-back to satisfy indemnification obligations that may arise. We included the financial results of Genelex and YouScript in our consolidated financial statements from the acquisition date, which were not material for the six months ended June 30, 2020. We recorded $0.9 million of transaction costs related to the acquisition of Genelex and YouScript as general and administrative expense during the six months ended June 30, 2020.

We may be required to pay contingent consideration in the form of additional shares of our common stock in connection with the acquisition of Genelex if, within a specified period following the closing, we achieve a certain product milestone, in which case we would issue shares of our common stock with a value equal to a portion of the gross revenues actually received by us for a pharmacogenetic product reimbursed through certain payers during an earn out period of up to four years. As of the acquisition date, the fair value of this contingent consideration was $2.0 million in the form of shares of our common stock. The material factors that may impact the fair value of the contingent consideration, and therefore, this liability, are the probabilities and timing of achieving the related milestone, the estimated revenues achieved for a pharmacogenetic product and the discount rate we used to estimate the fair value. Significant changes in any of the probabilities of success would result in a significant change in the fair value, which is estimated at each reporting date with changes reflected as general and administrative expense. As of June 30, 2020, the fair value of the contingent consideration was $2.6 million.

The following table summarizes the purchase prices recorded as a part of the acquisition of Genelex and YouScript (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Genelex</th>
<th>YouScript</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash transferred</td>
<td>$972</td>
<td>$24,462</td>
<td>$25,434</td>
</tr>
<tr>
<td>Hold-back consideration - cash</td>
<td>—</td>
<td>$1,385</td>
<td></td>
</tr>
<tr>
<td>Hold-back consideration - common stock</td>
<td>781</td>
<td>$5,392</td>
<td>$6,173</td>
</tr>
<tr>
<td>Contingent consideration</td>
<td>1,994</td>
<td>—</td>
<td>1,994</td>
</tr>
<tr>
<td>Common stock transferred</td>
<td>9,463</td>
<td>21,464</td>
<td>30,927</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$13,210</td>
<td>$52,703</td>
<td>$65,913</td>
</tr>
</tbody>
</table>
Assets acquired and liabilities assumed are recorded based on valuations derived from estimated fair value assessments and assumptions used by us. While we believe that our estimates and assumptions underlying the valuations are reasonable, different estimates and assumptions could result in different valuations assigned to the individual assets acquired and liabilities assumed, and the resulting amount of goodwill. The following table summarizes the fair values of assets acquired and liabilities assumed through our acquisitions of Genelex and YouScript at the date of acquisition (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Genelex</th>
<th>YouScript</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$33</td>
<td>$24</td>
<td>$57</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>221</td>
<td>56</td>
<td>277</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>—</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Operating lease assets</td>
<td>—</td>
<td>355</td>
<td>355</td>
</tr>
<tr>
<td>Developed technology</td>
<td>9,209</td>
<td>25,716</td>
<td>34,925</td>
</tr>
<tr>
<td><strong>Total identifiable assets acquired</strong></td>
<td>9,463</td>
<td>26,221</td>
<td>35,684</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>(320)</td>
<td>(481)</td>
<td>(801)</td>
</tr>
<tr>
<td>Deferred tax liability</td>
<td>—</td>
<td>(2,600)</td>
<td>(2,600)</td>
</tr>
<tr>
<td>Other long-term liabilities</td>
<td>—</td>
<td>(163)</td>
<td>(163)</td>
</tr>
<tr>
<td><strong>Net identifiable assets acquired</strong></td>
<td>9,143</td>
<td>22,977</td>
<td>32,120</td>
</tr>
<tr>
<td>Goodwill</td>
<td>4,067</td>
<td>29,726</td>
<td>33,793</td>
</tr>
<tr>
<td><strong>Total purchase price</strong></td>
<td>$13,210</td>
<td>$52,703</td>
<td>$65,913</td>
</tr>
</tbody>
</table>

Based on the guidance provided in ASC 805, Business Combinations, we accounted for the acquisitions of Genelex and YouScript as business combinations in which we determined that 1) Genelex and YouScript were businesses which combine inputs and processes to create outputs, and 2) substantially all of the fair value of gross assets acquired were not concentrated in a single identifiable asset or group of similar identifiable assets.

Our purchase price allocation for the acquisitions is preliminary and subject to revision as additional information about fair value of assets and liabilities becomes available, primarily related to our deferred tax liability assumed. Additional information that existed as of the acquisition date but at the time was unknown to us may become known to us during the remainder of the measurement period, a period not to exceed 12 months from the acquisition date.

We measured the identifiable assets and liabilities assumed at their acquisition date fair values separately from goodwill. The intangible assets acquired are the developed technologies related to Genelex's and YouScript's technology platforms. The fair value of the developed technologies were estimated using an income approach with an estimated useful life of eight years. As of the acquisition date, we recorded stock payable liabilities of $6.2 million to represent the hold-back obligation to issue shares subject to indemnification claims that may arise. These liabilities are adjusted at each reporting period based on the fair value of our common stock, which is a Level 3 input. As of June 30, 2020, the value of this liability was $16.0 million with the change recorded in other income (expense), net.

Goodwill represents the excess of the purchase price over the fair value of the net tangible and intangible assets acquired. The acquisitions of Genelex and YouScript resulted in the recognition of $33.8 million of goodwill which we believe relates primarily to future functionality and expansion of the acquired technologies. Of the goodwill recognized, $29.7 million related to the YouScript acquisition is not deductible for tax purposes.

**ArcherDX**

In June 2020, we entered into a definitive agreement with ArcherDX, a genomics analysis company democratizing precision oncology. Under the terms of the agreement, we will acquire ArcherDX for upfront consideration consisting of 30.0 million shares of Invitae common stock and $325.0 million in cash, plus up to an additional 27.0 million shares of Invitae common stock payable in connection with the achievement of certain milestones. The transaction is expected to close in several months from the signing of the definitive agreement, subject to customary closing conditions including approval by the stockholders of Invitae.

In connection with the proposed transaction with ArcherDX, we have entered into a definitive agreement to sell $275.0 million in common stock in a private placement at a price of $16.85 per share. The private placement is expected to close concurrently with the proposed combination, subject to the satisfaction of customary closing conditions. The proceeds from the private placement are expected to be used to fund a portion of the cash...
consideration payable in the proposed merger with ArcherDX. In addition, we have entered into a debt commitment letter for up to a $200.0 million senior secured term loan facility, subject to completion of certain customary closing conditions. In connection with the credit facility, we will issue warrants to purchase 1.0 million shares of our common stock with an exercise price of $16.85 per share subject to the funding of the credit facility. The term loan facility is available (i) to finance, in whole or in part, the proposed merger, (ii) to pay fees, costs and expenses related to the proposed merger, the debt financing and the other transactions related to the proposed merger and (iii) for other general working capital purposes. We will recognize these arrangements when the funding occurs which we expect to take place concurrently with the closing of the ArcherDX transaction.

5. Goodwill and intangible assets

**Goodwill**

The changes in the carrying amounts of goodwill were as follows (in thousands):

| Balance as of December 31, 2019 | $    | 126,777 |
| Goodwill acquired - Diploid     |      | 50,655  |
| Goodwill acquired - Genelex     |      | 4,067   |
| Goodwill acquired - YouScript   |      | 29,726  |
| Balance as of June 30, 2020    |      | 211,225 |

**Intangible assets**

The following table presents details of our intangible assets (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>June 30, 2020</th>
<th>December 31, 2019</th>
<th>Weighted-Average Useful Life (in Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer relationships</td>
<td>$23,763</td>
<td>$23,763</td>
<td>10.0</td>
</tr>
<tr>
<td>Developed technology</td>
<td>$161,110</td>
<td>$84,396</td>
<td>8.6</td>
</tr>
<tr>
<td>Non-compete agreement</td>
<td>$286</td>
<td>$286</td>
<td>5.0</td>
</tr>
<tr>
<td>Trade name</td>
<td>$576</td>
<td>$576</td>
<td>2.7</td>
</tr>
<tr>
<td>Patent licensing agreement</td>
<td>$496</td>
<td>$496</td>
<td>15.0</td>
</tr>
<tr>
<td>Favorable leases</td>
<td>$247</td>
<td>$247</td>
<td>2.2</td>
</tr>
<tr>
<td>In-process research and development</td>
<td>$29,988</td>
<td>$29,988</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>$216,466</td>
<td>$139,752</td>
<td>8.8</td>
</tr>
</tbody>
</table>

Acquisition-related intangibles included in the above table are finite-lived, other than in-process research and development which has an indefinite life, and are carried at cost less accumulated amortization. Customer relationships are being amortized on an accelerated basis, in proportion to estimated cash flows. All other finite-lived acquisition-related intangibles are being amortized on a straight-line basis over their estimated lives, which approximates the pattern in which the economic benefits of the intangible assets are realized. Amortization expense was $5.7 million and $1.3 million for the three months ended June 30, 2020 and 2019, respectively, and $9.2 million and $2.6 million for the six months ended June 30, 2020 and 2019, respectively. Amortization expense is recorded to cost of revenue, research and development, sales and marketing and general and administrative expense.
The following table summarizes our estimated future amortization expense of intangible assets with finite lives as of June 30, 2020 (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>June 30, 2020</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 (remainder of year)</td>
<td>$ 11,207</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>22,793</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>21,087</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>20,074</td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>19,796</td>
<td></td>
</tr>
<tr>
<td>Thereafter</td>
<td>67,699</td>
<td></td>
</tr>
<tr>
<td><strong>Total estimated future amortization expense</strong></td>
<td><strong>$ 162,656</strong></td>
<td></td>
</tr>
</tbody>
</table>

6. Balance sheet components

**Property and equipment, net**

Property and equipment consisted of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>June 30, 2020</th>
<th>December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leasehold improvements</td>
<td>$ 23,251</td>
<td>$ 18,352</td>
</tr>
<tr>
<td>Laboratory equipment</td>
<td>30,668</td>
<td>24,873</td>
</tr>
<tr>
<td>Computer equipment</td>
<td>6,760</td>
<td>5,995</td>
</tr>
<tr>
<td>Software</td>
<td>2,611</td>
<td>2,611</td>
</tr>
<tr>
<td>Furniture and fixtures</td>
<td>1,277</td>
<td>1,198</td>
</tr>
<tr>
<td>Automobiles</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>Construction-in-progress</td>
<td>9,070</td>
<td>10,795</td>
</tr>
<tr>
<td><strong>Total property and equipment, gross</strong></td>
<td><strong>73,695</strong></td>
<td><strong>63,882</strong></td>
</tr>
<tr>
<td>Accumulated depreciation and amortization</td>
<td>(30,314)</td>
<td>(26,135)</td>
</tr>
<tr>
<td><strong>Total property and equipment, net</strong></td>
<td><strong>$ 43,381</strong></td>
<td><strong>$ 37,747</strong></td>
</tr>
</tbody>
</table>

Depreciation expense was $2.3 million and $1.8 million for the three months ended June 30, 2020 and 2019, respectively, and $4.4 million and $3.4 million for the six months ended June 30, 2020 and 2019, respectively.

**Accrued liabilities**

Accrued liabilities consisted of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>June 30, 2020</th>
<th>December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrued compensation and related expenses</td>
<td>$ 20,144</td>
<td>$ 16,440</td>
</tr>
<tr>
<td>Compensation and other liabilities associated with business combinations</td>
<td>64,976</td>
<td>30,560</td>
</tr>
<tr>
<td>Deferred revenue</td>
<td>1,726</td>
<td>1,429</td>
</tr>
<tr>
<td>Other</td>
<td>12,644</td>
<td>16,385</td>
</tr>
<tr>
<td><strong>Total accrued liabilities</strong></td>
<td><strong>$ 99,490</strong></td>
<td><strong>$ 64,814</strong></td>
</tr>
</tbody>
</table>

7. Fair value measurements

Financial assets and liabilities are recorded at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date. The authoritative guidance establishes a three-level valuation hierarchy that prioritizes the inputs to valuation techniques used to measure fair value based upon whether such inputs are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect market assumptions made by the reporting entity.

The three-level hierarchy for the inputs to valuation techniques is summarized as follows:

Level 1—Observable inputs such as quoted prices (unadjusted) for identical instruments in active markets.

15
Level 2—Observable inputs such as quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, or model-derived valuations whose significant inputs are observable.

Level 3—Unobservable inputs that reflect the reporting entity’s own assumptions.

The following tables set forth the fair value of our consolidated financial instruments that were measured at fair value on a recurring basis (in thousands):

<table>
<thead>
<tr>
<th>Financial assets:</th>
<th>June 30, 2020</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amortized Cost</td>
<td>Unrealized Gains</td>
<td>Unrealized Losses</td>
<td>Estimated Fair Value</td>
<td>Level 1</td>
</tr>
<tr>
<td>Money market funds</td>
<td>$ 132,990</td>
<td>$ —</td>
<td>$ —</td>
<td>$ 132,990</td>
<td>$ 132,990</td>
</tr>
<tr>
<td>Certificates of deposit</td>
<td>300</td>
<td>—</td>
<td>—</td>
<td>300</td>
<td>—</td>
</tr>
<tr>
<td>U.S. treasury notes</td>
<td>197,721</td>
<td>570</td>
<td>—</td>
<td>198,291</td>
<td>198,291</td>
</tr>
<tr>
<td>U.S. government agency securities</td>
<td>55,340</td>
<td>2</td>
<td>—</td>
<td>55,342</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total financial assets</strong></td>
<td>$ 386,351</td>
<td>$ 572</td>
<td>—</td>
<td>$ 386,923</td>
<td>$ 331,281</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial liabilities:</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock payable liability</td>
<td>$ 43,625</td>
<td>$ —</td>
<td>$ —</td>
<td>$ 43,625</td>
<td></td>
</tr>
<tr>
<td>Contingent consideration</td>
<td>18,018</td>
<td>—</td>
<td>—</td>
<td>18,018</td>
<td></td>
</tr>
<tr>
<td><strong>Total financial liabilities</strong></td>
<td>$ 61,643</td>
<td>$ —</td>
<td>$ —</td>
<td>$ 61,643</td>
<td></td>
</tr>
</tbody>
</table>

**Reported as:**

| June 30, 2020 | |
|---------------|--|---------------|---------------|---------------|
| Cash equivalents | $ | 126,647 |
| Restricted cash | | $ 6,343 |
| Marketable securities | | $ 253,933 |
| **Total cash equivalents, restricted cash, and marketable securities** | $ | 386,923 |
| Accrued liabilities | $ | 15,441 |
| Other long-term liabilities | $ | 46,202 |
### Financial assets:

<table>
<thead>
<tr>
<th>Financial assets</th>
<th>Amortized Cost</th>
<th>Unrealized Gains</th>
<th>Unrealized Losses</th>
<th>Estimated Fair Value</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money market funds</td>
<td>$39,396</td>
<td>$—</td>
<td>$—</td>
<td>$39,396</td>
<td>$39,396</td>
<td>$—</td>
<td>$—</td>
</tr>
<tr>
<td>Certificates of deposit</td>
<td>300</td>
<td>$—</td>
<td>$—</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>U.S. treasury notes</td>
<td>150,627</td>
<td>$—</td>
<td>$(15)</td>
<td>150,612</td>
<td>150,612</td>
<td>$—</td>
<td>$—</td>
</tr>
<tr>
<td>U.S. government agency securities</td>
<td>193,302</td>
<td>6</td>
<td>$—</td>
<td>193,308</td>
<td>193,308</td>
<td>$—</td>
<td>$—</td>
</tr>
<tr>
<td>Total financial assets</td>
<td>$383,625</td>
<td>$6</td>
<td>$(15)</td>
<td>$383,616</td>
<td>$190,008</td>
<td>$193,608</td>
<td>$—</td>
</tr>
</tbody>
</table>

### Financial liabilities:

<table>
<thead>
<tr>
<th>Financial liabilities</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingent consideration</td>
<td></td>
<td></td>
<td></td>
<td>$11,300</td>
<td></td>
<td></td>
<td>$11,300</td>
</tr>
<tr>
<td>Total financial liabilities</td>
<td></td>
<td></td>
<td></td>
<td>$11,300</td>
<td></td>
<td></td>
<td>$11,300</td>
</tr>
</tbody>
</table>

#### Reported as:

<table>
<thead>
<tr>
<th>December 31, 2019</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash equivalents</td>
<td>$136,997</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restricted cash</td>
<td>6,183</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketable securities</td>
<td>240,436</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total cash equivalents, restricted cash, and marketable securities</td>
<td>$383,616</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Accrued liabilities                    | $3,300         |                  |                  |                     |         |         |         |
| Other long-term liabilities            | $8,000         |                  |                  |                     |         |         |         |

There were no transfers between Level 1, Level 2 and Level 3 during the periods presented. The total fair value of investments with unrealized losses at June 30, 2020 was $80.2 million. None of the available-for-sale securities held as of June 30, 2020 have been in a continuous unrealized loss position for more than one year.

Our certificates of deposit and debt securities of U.S. government agency entities are classified as Level 2 as they are valued based upon quoted market prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active and model-based valuation techniques for which all significant inputs are observable in the market or can be corroborated by observable market data for substantially the full term of the assets. Where applicable, these models project future cash flows and discount the future amounts to a present value using market-based observable inputs obtained from various third-party data providers, including but not limited to benchmark yields, interest rate curves, reported trades, broker/dealer quotes and reference data.

Stock payable liabilities relate to certain indemnification hold-backs resulting from business combinations that are settled in shares of our common stock. We elected to account for these liabilities using the fair value option due to the inherent nature of the liabilities and the changes in value of the underlying shares that will ultimately be issued to settle the liabilities. The estimated fair value of these liabilities is classified as Level 3 and determined based upon the number of shares that are issuable to the sellers and the quoted closing price of our common stock as of the reporting date. The number of shares that will ultimately be issued is subject to adjustment for indemnified claims that existed as of the closing date for each acquisition. Changes in the number of shares issued and share price can significantly affect the estimated fair value of the liabilities. During the three and six months ended June 30, 2020, the change in fair value related to stock payable liabilities recorded to other income (expense), net was expense of $25.4 million and $21.7 million, respectively.

As of June 30, 2020, we had contingent obligations of $15.4 million of our common stock to the former owners of Jungla in connection with our acquisition of Jungla in July 2019. The amount of the contingent obligation is dependent upon achievement of certain post-close development milestones. We estimated the fair value of the contingent consideration as $10.7 million at the acquisition date in July 2019 using a discounted cash flow technique based on estimated achievement of the post-close milestones and discount rates which were Level 3 inputs not supported by market activity. These inputs can significantly affect the estimated fair value of the...
contingent consideration. The value of the liability is subsequently remeasured to fair value at each reporting date with changes recorded as general and administrative expense.

As of June 30, 2020, we had contingent obligations of $2.6 million of our common stock to the former owners of Genelex in connection with our acquisition of Genelex in April 2020. The amount of the contingent obligation is dependent upon achievement of a certain post-close milestone and the gross revenues actually received by us for a pharmacogenetic product reimbursed through certain payers during an earn out period of up to four years. We estimated the fair value of the contingent consideration as $2.0 million at the acquisition date in April 2020 using a discounted cash flow technique based on estimated achievement of the post-close milestone, our estimate of amounts to ultimately be paid, and discount rates which were Level 3 inputs not supported by market activity. These inputs can significantly affect the estimated fair value of the contingent consideration. The value of the liability is subsequently remeasured to fair value at each reporting date with changes recorded as general and administrative expense.

8. Commitments and contingencies

Leases

Operating leases

In 2015, we entered into a lease agreement for our headquarters and main production facility in San Francisco, California which commenced in 2016. This lease expires in 2026 and we may renew the lease for an additional ten years. This optional period was not considered reasonably certain to be exercised and therefore we determined the lease term to be a ten-year period expiring in 2026. In connection with the execution of the lease, we provided a security deposit of approximately $4.6 million which is included in restricted cash in our consolidated balance sheets. We also have other operating leases for office and laboratory space in California, Massachusetts, New York and Washington. We expect to enter into new leases and modifying existing leases as we support continued growth of our operations.

As of June 30, 2020, the weighted-average remaining lease term for our operating leases was 5.9 years and the weighted-average discount rate used to determine our operating lease liability was 11.5%. Cash payments included in the measurement of our operating lease liabilities were $2.7 million and $2.5 million for the three months ended June 30, 2020 and 2019, respectively, and $5.4 million and $4.9 million for the six months ended June 30, 2020 and 2019, respectively.

The components of lease costs, which were included in cost of revenue, research and development, selling and marketing and general and administrative expenses on our consolidated statements of operations were as follows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Three Months Ended June 30</th>
<th>Six Months Ended June 30</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2019</td>
</tr>
<tr>
<td>Operating lease costs</td>
<td>2,653</td>
<td>2,564</td>
</tr>
<tr>
<td>Sublease income</td>
<td>—</td>
<td>(43 )</td>
</tr>
<tr>
<td>Total operating lease costs</td>
<td>2,653</td>
<td>2,521</td>
</tr>
<tr>
<td>Finance lease costs</td>
<td>475</td>
<td>391</td>
</tr>
<tr>
<td>Total lease costs</td>
<td>3,128</td>
<td>2,912</td>
</tr>
</tbody>
</table>
Future minimum payments under non-cancelable operating leases as of June 30, 2020 are as follows (in thousands):

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 (remainder of year)</td>
<td>$5,749</td>
</tr>
<tr>
<td>2021</td>
<td>11,693</td>
</tr>
<tr>
<td>2022</td>
<td>10,922</td>
</tr>
<tr>
<td>2023</td>
<td>10,424</td>
</tr>
<tr>
<td>2024</td>
<td>10,560</td>
</tr>
<tr>
<td>Thereafter</td>
<td>18,459</td>
</tr>
</tbody>
</table>

Future non-cancelable minimum operating lease payments: $67,807
Less: imputed interest: $(19,334)
Total operating lease liabilities: $48,473
Less: current portion: $(6,339)
Operating lease obligations, net of current portion: $42,134

Finance leases

We have entered into various finance lease agreements to obtain laboratory equipment. The terms of our finance leases are generally three years with a weighted-average remaining lease term of 2.0 years as of June 30, 2020 and are typically secured by the underlying equipment. The weighted-average discount rate used to determine our finance lease liability was 5.6%. The portion of the future payments designated as principal repayment was classified as a finance lease obligation on our consolidated balance sheets. Finance lease assets are recorded within other assets on our consolidated balance sheet and were $4.7 million and $5.6 million as of June 30, 2020 and December 31, 2019, respectively. Cash payments included in the measurement of our finance lease liabilities were $0.6 million for each of the three months periods ended June 30, 2020 and 2019, and $1.3 million and $1.1 million for the six months ended June 30, 2020 and 2019, respectively.

Future payments under finance leases at June 30, 2020 are as follows (in thousands):

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 (remainder of year)</td>
<td>$741</td>
</tr>
<tr>
<td>2021</td>
<td>611</td>
</tr>
<tr>
<td>2022</td>
<td>612</td>
</tr>
<tr>
<td>Total finance lease obligations</td>
<td>1,964</td>
</tr>
<tr>
<td>Less: interest</td>
<td>$(108)</td>
</tr>
<tr>
<td>Present value of net minimum finance lease payments</td>
<td>$1,856</td>
</tr>
<tr>
<td>Less: current portion</td>
<td>$(977)</td>
</tr>
<tr>
<td>Finance lease obligations, net of current portion</td>
<td>$879</td>
</tr>
</tbody>
</table>

Debt financing

In November 2018, we entered into a Note Purchase Agreement (the "2018 Note Purchase Agreement") pursuant to which we were eligible to borrow an aggregate principal amount up to $200.0 million over a seven year maturity term which included an initial borrowing of $75.0 million in November 2018. We received net proceeds of $10.3 million after terminating and repaying the balance of our obligations of approximately $64.7 million with our previous lender.

In September 2019, we settled our obligations under the 2018 Note Purchase Agreement in full for $85.7 million, which included repayment of principal of $75.0 million, accrued interest of $2.4 million, and prepayment fees of $8.9 million which were recorded as debt extinguishment costs in other income (expense), net in our statement of operations during the three months ended September 30, 2019.

Interest expense related to our debt financings, excluding the impact of our Convertible Senior Notes (defined below), was nil and $2.0 million for the three months ended June 30, 2020 and 2019, respectively, and nil and $3.9 million for the six months ended June 30, 2020 and 2019, respectively.
**Convertible Senior Notes**

In September 2019, we issued, at par value, $350.0 million aggregate principal amount of 2.00% Convertible Senior Notes due 2024 ("Convertible Senior Notes") in a private offering. The Convertible Senior Notes are our senior unsecured obligations and will mature on September 1, 2024, unless earlier converted, redeemed or repurchased. The Convertible Senior Notes bear cash interest at a rate of 2.0% per year, payable semi-annually in arrears on March 1 and September 1 of each year, beginning on March 1, 2020.

Upon conversion, the Convertible Senior Notes will be convertible into cash, shares of our common stock or a combination of cash and shares of our common stock, at our election. Our current intent is to settle the principal amount of the Convertible Senior Notes in cash upon conversion, with any remaining conversion value being delivered in shares of our common stock. The initial conversion rate for the Convertible Senior Notes is 33.6293 shares of our common stock per $1,000 principal amount of the Convertible Senior Notes (equivalent to an initial conversion price of approximately $29.74 per share of common stock).

If we undergo a fundamental change (as defined in the indenture governing the Convertible Senior Notes), the holders of the Convertible Senior Notes may require us to repurchase all or any portion of their Convertible Senior Notes for cash at a repurchase price equal to 100% of the principal amount of the Convertible Senior Notes to be repurchased plus accrued and unpaid interest to, but excluding, the redemption date.

The Convertible Senior Notes will be convertible at the option of the holders at any time prior to the close of business on the business day immediately preceding March 1, 2024, only under the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on December 31, 2019 (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price for the Convertible Senior Notes on each applicable trading day; (2) during the five business day period after any five consecutive trading day period (the "measurement period") in which the trading price per $1,000 principal amount of Convertible Senior Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day; (3) if we call any or all of the Convertible Senior Notes for redemption, at any time prior to the close of business on the scheduled trading day immediately preceding the redemption date; or (4) upon the occurrence of specified corporate events. On or after March 1, 2024 until the close of business on the business day immediately preceding the maturity date, holders may convert their Convertible Senior Notes at any time, regardless of the foregoing circumstances. As of June 30, 2020, none of the above circumstances had occurred and therefore the Convertible Senior Notes could not have been converted.

We may not redeem the Convertible Senior Notes prior to September 6, 2022. We may redeem for cash all or any portion of the Convertible Senior Notes, at our option, on or after September 6, 2022 and on or before the 30th scheduled trading day immediately before the maturity date if the last reported sale price of the Common Stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending on, and including, the trading day immediately preceding the date on which we provide notice of redemption at a redemption price equal to 100% of the principal amount of the notes to be redeemed, plus accrued and unpaid interest to, but excluding, the redemption date.

The Convertible Senior Notes as of June 30, 2020 consisted of the following (in thousands):

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding principal</td>
<td>$350,000</td>
</tr>
<tr>
<td>Unamortized debt discount and issuance costs</td>
<td>(73,908)</td>
</tr>
<tr>
<td>Net carrying amount, liability component</td>
<td>$276,092</td>
</tr>
</tbody>
</table>

As of June 30, 2020, the fair value of the Convertible Senior Notes was $406.9 million. The estimated fair value of the Convertible Senior Notes, which are classified as Level 2 financial instruments, was determined based on the estimated or actual bid prices of the Convertible Senior Notes in an over-the-counter market. We recognized $5.5 million and $10.9 million of interest expense related to the Convertible Senior Notes during the three and six months ended June 30, 2020, respectively.
Other commitments
In the normal course of business, we enter into various purchase commitments primarily related to service agreements and laboratory supplies. At June 30, 2020, our total future payments under noncancelable unconditional purchase commitments having a remaining term of over one year were $6.0 million.

Guarantees and indemnifications
As permitted under Delaware law and in accordance with our bylaws, we indemnify our directors and officers for certain events or occurrences while the officer or director is or was serving in such capacity. The maximum amount of potential future indemnification is unlimited; however, we maintain director and officer liability insurance. This insurance allows the transfer of the risk associated with our exposure and may enable us to recover a portion of any future amounts paid. We believe the fair value of these indemnification agreements is minimal. Accordingly, we did not record any liabilities associated with these indemnification agreements at June 30, 2020 or December 31, 2019.

Contingencies
We were not a party to any material legal proceedings at June 30, 2020, or at the date of this report. We are and may from time to time become involved in various legal proceedings and claims arising in the ordinary course of business. While we believe any such claims are unsubstantiated, and we believe we are in compliance with applicable laws and regulations applicable to our business, the resolution of any such claims could be material.

9. Stockholders’ equity

Shares outstanding
Shares of convertible preferred and common stock were as follows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Convertible preferred stock:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shares outstanding, beginning of period</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>3,459</td>
</tr>
<tr>
<td>Conversion into common stock</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shares outstanding, end of period</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>125</td>
</tr>
<tr>
<td>Common stock:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shares outstanding, beginning of period</td>
<td>101,920</td>
<td>89,601</td>
<td>98,796</td>
<td>75,481</td>
</tr>
<tr>
<td>Common stock issued in connection with public offering</td>
<td>23,058</td>
<td>—</td>
<td>23,058</td>
<td>10,350</td>
</tr>
<tr>
<td>Common stock issued on exercise of stock options, net</td>
<td>130</td>
<td>80</td>
<td>308</td>
<td>340</td>
</tr>
<tr>
<td>Common stock issued pursuant to vesting of RSUs</td>
<td>3,055</td>
<td>1,124</td>
<td>3,481</td>
<td>1,245</td>
</tr>
<tr>
<td>Common stock issued pursuant to exercises of warrants</td>
<td>6</td>
<td>4</td>
<td>148</td>
<td>19</td>
</tr>
<tr>
<td>Common stock issued pursuant to employee stock purchase plan</td>
<td>342</td>
<td>235</td>
<td>342</td>
<td>235</td>
</tr>
<tr>
<td>Common stock issued pursuant to business combinations</td>
<td>2,778</td>
<td>2,719</td>
<td>5,156</td>
<td>2,759</td>
</tr>
<tr>
<td>Common stock issued upon conversion of preferred stock</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>3,334</td>
</tr>
<tr>
<td>Shares outstanding, end of period</td>
<td>131,289</td>
<td>93,763</td>
<td>131,289</td>
<td>93,763</td>
</tr>
</tbody>
</table>

2018 Sales Agreement
In August 2018, we entered into a Common Stock Sales Agreement (the “2018 Sales Agreement”) with Cowen and Company, LLC (“Cowen”), under which we may offer and sell from time to time at our sole discretion shares of our common stock through Cowen as our sales agent, in an aggregate amount not to exceed $75.0 million. Cowen may sell the shares by any method permitted by law deemed to be an “at the market” offering as defined in Rule 415 of the Securities Act of 1933, including without limitation sales made directly on The New York Stock Exchange, and also may sell the shares in privately negotiated transactions, subject to our prior approval. Per the terms of the agreement, Cowen receives a commission equal to 3% of the gross proceeds of the sales price of all shares sold through it as sales agent under the 2018 Sales Agreement. In March 2019, we amended the 2018 Sales Agreement.
to increase the aggregate amount of our common stock to be sold under this agreement not to exceed $175.0 million. During the second quarter of 2020, we sold a total of 2.6 million shares of common stock under the 2018 Sales Agreement at an average price of $17.60 per share for aggregate gross proceeds of $46.0 million and net proceeds of $44.5 million. Pursuant to the Securities Purchase Agreement in connection with the private placement, we have agreed not to use the 2018 Sales Agreement unless certain conditions are met.

Public offering
In April 2020, we sold, in an underwritten public offering, an aggregate of 20.4 million shares of our common stock at a price of $9.00 per share, for gross proceeds of $184.0 million and net proceeds of $173.0 million after deducting underwriting discounts and commissions and offering expenses.

10. Stock incentive plans
Stock incentive plans
In 2010, we adopted the 2010 Incentive Plan (the “2010 Plan”). The 2010 Plan provides for the granting of stock-based awards to employees, directors and consultants under terms and provisions established by our Board of Directors. Under the terms of the 2010 Plan, options may be granted at an exercise price not less than the fair market value of our common stock. For employees holding more than 10% of the voting rights of all classes of stock, the exercise prices for incentive and nonstatutory stock options must be at least 110% of fair market of our common stock on the grant date, as determined by our Board of Directors. The terms of options granted under the 2010 Plan may not exceed ten years.

In January 2015, we adopted the 2015 Stock Incentive Plan (the “2015 Plan”), which became effective upon the closing of our initial public offering (“IPO”). Shares outstanding under the 2010 Plan were transferred to the 2015 Plan upon effectiveness of the 2015 Plan. The 2015 Plan provides for automatic annual increases in shares available for grant, beginning on January 1, 2016 through January 1, 2025. In addition, shares subject to awards under the 2010 Plan that are forfeited or terminated will be added to the 2015 Plan. The 2015 Plan provides for the grant of incentive stock options, nonstatutory stock options, restricted stock awards, stock units, stock appreciation rights and other forms of equity compensation, all of which may be granted to employees, including officers, non-employee directors and consultants. Additionally, the 2015 Plan provides for the grant of cash-based awards. We amended and restated the 2015 Plan to create a pool of shares to be awarded solely as a material inducement to employees.

Options granted generally vest over a period of four years. Typically, the vesting schedule for options granted to newly hired employees provides that 1/4 of the award vests upon the first anniversary of the employee’s date of hire, with the remainder of the award vesting monthly thereafter at a rate of 1/48 of the total shares subject to the option. All other options typically vest in equal monthly installments over the four-year vesting schedule.

RSUs generally vest over a period of three years. Typically, the vesting schedule for RSUs provides that 1/3 of the award vests upon each anniversary of the grant date, with certain awards that include a portion that vests immediately upon grant. In June 2019, we granted Time-based RSUs in connection with the acquisition of Singular Bio which vest in three equal installments over a period of 18 months and PRSUs that vest based on the achievement of performance conditions; see further details in Note 4, “Business combinations.”

Under our management incentive compensation plan, in July 2019 we granted PRSUs to our executive officers as well as other specified senior level employees based on the level of achievement of a specified 2019 revenue goal. One-third of the 0.8 million shares that were ultimately awarded under this plan vested during the six months ended June 30, 2020 and the remaining awards will continue to vest over a period of two years. In June 2020, we granted 0.3 million PRSUs under this plan which are based on the level of achievement of a specified 2020 cash burn goal. These PRSUs will vest beginning in 2021 over a period of one year and may range from 0% to 100% of the target amount of shares, depending on eligibility and performance. As of June 30, 2020, these PRSUs had a fair value of $3.6 million based on an estimated issuance of 0.2 million shares and expectation of the performance condition.
Activity under the 2010 Plan and the 2015 Plan is set forth below (in thousands, except per share amounts and years):

<table>
<thead>
<tr>
<th>Shares Available For Grant</th>
<th>Stock Options Outstanding</th>
<th>Weighted-Average Exercise Price Per Share</th>
<th>Weighted-Average Remaining Contractual Life (Years)</th>
<th>Aggregate Intrinsic Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balances at December 31, 2019</td>
<td>5,444</td>
<td>3,542</td>
<td>$ 9.49</td>
<td>$ 24,966</td>
</tr>
<tr>
<td>Additional shares reserved</td>
<td>5,027</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Options granted</td>
<td>(282)</td>
<td>282</td>
<td>16.28</td>
<td></td>
</tr>
<tr>
<td>Options exercised</td>
<td>—</td>
<td>(308)</td>
<td>7.04</td>
<td></td>
</tr>
<tr>
<td>RSUs and PRSUs granted</td>
<td>(3,150)</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RSUs and PRSUs cancelled</td>
<td>337</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balances at June 30, 2020</td>
<td>7,376</td>
<td>3,516</td>
<td>$ 10.26</td>
<td>$ 70,414</td>
</tr>
<tr>
<td>Options exercisable at June 30, 2020</td>
<td>2,940</td>
<td>$ 9.30</td>
<td>5.5</td>
<td>$ 61,695</td>
</tr>
<tr>
<td>Options vested and expected to vest at June 30, 2020</td>
<td>3,414</td>
<td>$ 10.08</td>
<td>6.0</td>
<td>$ 68,992</td>
</tr>
</tbody>
</table>

(1) Includes the changes in the Time-based RSUs and PRSUs granted as a part of the Singular Bio acquisition in June 2019 which are based on a fixed dollar value. The number of shares issued will be variable until the awards vest. See further details in Note 4, "Business combinations."

The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying stock options and the fair value of our common stock for stock options that were in-the-money.

The weighted-average fair value per share of options to purchase common stock granted was $10.10 and $14.52 in the six months ended June 30, 2020 and 2019, respectively. The total grant-date fair value of options to purchase common stock vested was $1.8 million and $2.5 million in the six months ended June 30, 2020 and 2019, respectively. The intrinsic value of options to purchase common stock exercised was $3.7 million and $4.5 million in the six months ended June 30, 2020 and 2019, respectively.

The following table summarizes RSU activity, which includes the changes in Time-based RSUs and PRSUs granted in connection with our acquisition of Singular Bio (in thousands, except per share data):

<table>
<thead>
<tr>
<th>Number of Shares</th>
<th>Weighted-Average Grant Date Fair Value Per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at December 31, 2019</td>
<td>8,885</td>
</tr>
<tr>
<td>RSUs granted</td>
<td>3,739</td>
</tr>
<tr>
<td>Time-based RSUs and PRSUs granted - Singular Bio (1)</td>
<td>(863)</td>
</tr>
<tr>
<td>PRSUs granted</td>
<td>274</td>
</tr>
<tr>
<td>RSUs vested</td>
<td>(3,481)</td>
</tr>
<tr>
<td>RSUs cancelled</td>
<td>(337)</td>
</tr>
<tr>
<td>Balance at June 30, 2020</td>
<td>8,217</td>
</tr>
</tbody>
</table>

(1) Includes the changes in the Time-based RSUs and PRSUs granted as a part of the Singular Bio acquisition in June 2019 which are based on a fixed dollar value. The number of shares issued will be variable until the awards vest which are adjusted above. The weighted-average grant date fair value per share reflects the fair value pricing of the full award. See further details in Note 4, "Business combinations."

2015 Employee Stock Purchase Plan

In January 2015, we adopted the 2015 Employee Stock Purchase Plan (the “ESPP”), which became effective upon the closing of the IPO. Employees participating in the ESPP may purchase common stock at 85% of the lesser of the fair market value of common stock on the purchase date or last trading day preceding the offering date. At June 30, 2020, cash received from payroll deductions pursuant to the ESPP was $1.0 million. At June 30, 2020, a total of 1.2 million shares of common stock were reserved for issuance under the ESPP.
**Stock-based compensation**

The following table summarizes stock-based compensation expense included in the consolidated statements of operations (in thousands):

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Cost of revenue</td>
<td>$2,356</td>
<td>$2,205</td>
<td>$3,217</td>
<td>$2,856</td>
</tr>
<tr>
<td>Research and development</td>
<td>41,565</td>
<td>6,767</td>
<td>63,769</td>
<td>8,572</td>
</tr>
<tr>
<td>Selling and marketing</td>
<td>3,298</td>
<td>2,914</td>
<td>5,120</td>
<td>4,157</td>
</tr>
<tr>
<td>General and administrative</td>
<td>4,627</td>
<td>2,431</td>
<td>9,018</td>
<td>3,955</td>
</tr>
<tr>
<td>Total stock-based compensation expense</td>
<td>$51,846</td>
<td>$14,317</td>
<td>$81,124</td>
<td>$19,540</td>
</tr>
</tbody>
</table>

**11. Net loss per share**

The following table presents the calculation of basic and diluted net loss per share (in thousands, except per share amounts):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net loss</td>
<td>(166,403)</td>
<td>(48,676)</td>
<td>(264,930)</td>
<td>(86,353)</td>
</tr>
<tr>
<td>Shares used in computing net loss per share, basic and diluted</td>
<td>129,023</td>
<td>90,863</td>
<td>112,765</td>
<td>85,148</td>
</tr>
<tr>
<td>Net loss per share, basic and diluted</td>
<td>(1.29)</td>
<td>(0.54)</td>
<td>(2.35)</td>
<td>(1.01)</td>
</tr>
</tbody>
</table>

The following common stock equivalents have been excluded from diluted net loss per share because their inclusion would be anti-dilutive (in thousands):

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares of common stock subject to outstanding options</td>
<td>3,416</td>
<td>3,669</td>
<td>3,447</td>
<td>3,714</td>
</tr>
<tr>
<td>Shares of common stock subject to outstanding warrants</td>
<td>369</td>
<td>593</td>
<td>429</td>
<td>601</td>
</tr>
<tr>
<td>Shares of common stock subject to outstanding RSUs</td>
<td>6,403</td>
<td>4,569</td>
<td>5,716</td>
<td>4,350</td>
</tr>
<tr>
<td>Shares of common stock subject to outstanding PRSUs</td>
<td>2,379</td>
<td>—</td>
<td>2,586</td>
<td>—</td>
</tr>
<tr>
<td>Shares of common stock pursuant to ESPP</td>
<td>313</td>
<td>46</td>
<td>318</td>
<td>55</td>
</tr>
<tr>
<td>Shares of common stock underlying Series A convertible preferred stock</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>1,288</td>
</tr>
<tr>
<td>Shares of common stock subject to convertible senior notes exercise</td>
<td>11,555</td>
<td>—</td>
<td>11,555</td>
<td>—</td>
</tr>
<tr>
<td>Total shares of common stock equivalents</td>
<td>24,560</td>
<td>9,002</td>
<td>24,176</td>
<td>10,008</td>
</tr>
</tbody>
</table>

**12. Geographic information**

Revenue by country is determined based on the billing address of the customer. The following presents revenue by country (in thousands):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>$43,334</td>
<td>$50,368</td>
<td>$103,140</td>
<td>$88,013</td>
</tr>
<tr>
<td>Canada</td>
<td>797</td>
<td>882</td>
<td>2,016</td>
<td>1,847</td>
</tr>
<tr>
<td>Rest of world</td>
<td>2,060</td>
<td>2,225</td>
<td>5,283</td>
<td>4,168</td>
</tr>
<tr>
<td>Total revenue</td>
<td>$46,191</td>
<td>$53,475</td>
<td>$110,439</td>
<td>$94,028</td>
</tr>
</tbody>
</table>
ITEM 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion of our financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and the related notes included in Item 1 of Part I of this report, and together with our audited consolidated financial statements and the related notes included in our Annual Report on Form 10-K for the year ended December 31, 2019. Historic results are not necessarily indicative of future results.

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements in this report other than statements of historical fact, including statements identified by words such as “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “expect” and similar expressions, are forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- the structure, timing, potential benefits, stockholder approval and/or completion of the proposed acquisition of ArcherDX;
- our views regarding the future of genetic testing and its role in mainstream medical practice;
- the impact of COVID-19 on our business and the actions we may take in response thereto;
- our mission and strategy for our business, products and technology, including our ability to expand our content and develop new content while maintaining attractive pricing, further enhance our genetic testing service and the related user experience, build interest in and demand for our tests and attract potential partners;
- the implementation of our business model;
- the expected benefits from and our ability to integrate our acquisitions;
- the rate and degree of market acceptance of our tests and genetic testing generally;
- our ability to scale our infrastructure and operations in a cost-effective manner;
- the timing of and our ability to introduce improvements to our genetic testing platform and to expand our assays to include additional genes;
- our expectations with respect to future hiring;
- the timing and results of studies with respect to our tests;
- developments and projections relating to our competitors and our industry;
- our competitive strengths;
- the degree to which individuals will share genetic information generally, as well as share any related potential economic opportunities with us;
- our commercial plans, including our sales and marketing expectations;
- our ability to obtain and maintain adequate reimbursement for our tests;
- regulatory developments in the United States and foreign countries;
- our ability to attract and retain key scientific or management personnel;
- our expectations regarding our ability to obtain and maintain intellectual property protection and not infringe on the rights of others;
- our ability to obtain funding for our operations and the growth of our business, including potential acquisitions;
- our financial performance;
- the impact of accounting pronouncements and our critical accounting policies, judgments, estimates and assumptions on our financial results;
- our expectations regarding our future revenue, cost of revenue, operating expenses and capital expenditures, and our future capital requirements; and
- the impact of tax laws on our business.

Forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from those expected. These risks and uncertainties include, but are not limited to, those risks discussed in Item 1A of Part II of this report. Although we believe that the expectations and assumptions reflected in the forward-looking statements are reasonable, we cannot guarantee future results, level of activity, performance or achievements. In addition, neither we nor any other person assumes responsibility for the accuracy
and completeness of any of these forward-looking statements. Any forward-looking statements in this report speak only as of the date of this report. We expressly disclaim any obligation or undertaking to update any forward-looking statements.

This report contains statistical data and estimates that we obtained from industry publications and reports. These publications typically indicate that they have obtained their information from sources they believe to be reliable, but do not guarantee the accuracy and completeness of their information. Some data contained in this report is also based on our internal estimates. Although we have not independently verified the third-party data, we believe it to be reasonable.

In this report, all references to “Invitae,” “we,” “us,” “our,” or “the Company” mean Invitae Corporation.

Invitae and the Invitae logo are trademarks of Invitae Corporation. We also refer to trademarks of other companies and organizations in this report.

Mission and strategy

Our mission is to bring comprehensive genetic information into mainstream medical practice, improving the quality of healthcare for billions of people. Our business model is to aggregate the world’s genetic tests into a single platform, consolidate and grow the genetic testing market, and on that foundation, build a new industry in which a network of customers and partners can work together to continue improving healthcare for every individual in the modernized healthcare system around the world.

Our strategy for long-term growth centers on five key drivers of our business, which we believe work in conjunction to create a flywheel effect extending our leadership position in the new market we are building:

- **Expanding our content offering.** We intend to continue steadily adding additional content to the Invitae platform, ultimately leading to affordable access to the personal molecular information relevant in enabling personalized medicine. The breadth and depth of our offering is a core and central contribution to an improved user experience.

- **Creating a unique user experience.** A state-of-the-art interactive platform will enhance our service offering, leverage the uniquely empowering characteristics of online sharing of genetic information and, we believe, enable a superior economic offering to clients. We intend to continue to expend substantial efforts developing, acquiring and implementing technology-driven improvements to our customers’ experience. We believe that an enhanced user experience and the resulting benefits to our brand and reputation will help draw customers to us over and above our direct efforts to do so.

- **Driving volume.** We intend to increase our brand equity and visibility through excellent service and a variety of marketing and promotional techniques, including scientific publications and presentations, sales, marketing, public relations, social media and web technology vehicles. We believe that rapidly increasing the volume of customers using our platform helps us to attract partners.

- **Attracting partners.** As we add more customers to our platform, we believe our business becomes particularly attractive to potential partners that can help the patients in our network further benefit from their genetic information or that provide us access to new customers who may wish to join our
We believe the cumulative effect of the increased volume brought by these strategic components will allow us to lower the cost of our service.

**Lowering the costs and price of genetic information.** Our goal is to provide customers with a broad menu of genetic content at a reasonable price and rapid turn-around time in order to grow volume and further achieve economies of scale. As we do so and experience further cost savings, we expect that those cost savings will allow us to deliver still more comprehensive information at decreasing prices and further improve the customer experience, allowing us to experience cumulative benefits from all of the efforts outlined above.

We seek to differentiate our service in the market by establishing an exceptional customer experience. To that end, we believe that elevating the needs of the customer over those of our other stakeholders is essential to our success. Thus, in our decision-making processes, we will strive to prioritize, in order:

1) the needs of our customers;
2) motivating our employees to serve the needs of our customers; and
3) our long-term stockholder value.

We are certain that focusing on customers as our top priority rather than short-term financial goals is the best way to build and operate an organization for maximum long-term value creation.

**Business overview**

We offer high-quality, comprehensive, affordable genetic testing across multiple clinical areas, including hereditary cancer, reproductive health, cardiology, neurology, pediatrics, metabolic conditions and rare diseases. In addition to our own research and development expertise, we have established a track record of building for the near- and long-term with our M&A strategy. We acquired multiple assets including four businesses in 2017, which expanded our suite of genome management offerings and strengthened our offering in reproductive health. In the first quarter of 2019, we expanded our reproductive offering by introducing our non-invasive prenatal screen ("NIPS"). In June 2019, we launched a direct channel to consumers to increase accessibility to our testing platform. To improve our technology stack and reduce costs associated with variant interpretation, we acquired Singular Bio, Inc. ("Singular Bio") in June 2019, Jungla Inc. ("Jungla") in July 2019, and Oracle BV operating under the name "Diploid" in March 2020. To further expand our ability to scale and improve customer experience with patient support telehealth solutions and the use of intuitive chatbots, we acquired Clear Genetics, Inc. ("Clear Genetics") in November 2019. In April 2020, we acquired YouScript Incorporated ("YouScript") and Genelex Solutions, LLC ("Genelex") to expand content and improve customer experience by bringing pharmacogenetic testing and integrated clinical decision support to Invitae. In order to expand content and increase access to personalized oncology, we entered into a definitive agreement to acquire ArcherDX, Inc. ("ArcherDX") in June 2020 which we expect to close in the next few months, with a view towards integrating Invitae's germline testing with ArcherDX's tumor profiling and liquid biopsy technology and services into a single platform to enable precision medicine approaches from diagnostic testing to therapy optimization and monitoring.

We have experienced rapid growth. For the years ended December 31, 2019, 2018 and 2017, our revenue was $216.8 million, $147.7 million, and $86.4 million, respectively. To meet the demands of scaling our business, we increased our number of employees to approximately 1,500 at June 30, 2020 from approximately 1,000 on June 30, 2019. Our sales force grew to approximately 270 at June 30, 2020 from approximately 190 at June 30, 2019.

Sales of our tests have grown significantly. In 2019, 2018 and 2017, we accessioned 482,000, 303,000, and 150,000 samples, respectively, and generated 469,000, 292,000, and 145,000 billable tests, respectively. In the six months ended June 30, 2020, we accessioned 274,000 samples and generated 264,000 billable tests compared to approximately 205,000 accessioned samples and 198,000 billable tests in the same period in 2019. Approximately 40% of the billable tests we performed in the first six months of 2020 were billable to institutions and patients, and the remainder were billable to third-party payers. Many of the gene tests on our assays are tests for which insurers reimburse. However, when we do not have reimbursement policies or contracts with private insurers, our claims for reimbursement may be denied upon submission, and we must appeal the claims. The appeals process is time consuming and expensive, and may not result in payment. Even if we are successful in achieving reimbursement, we may be paid at lower rates than if we were under contract with the third-party payer. When there is not a
contracted rate for reimbursement, there is typically a greater coinsurance or copayment requirement from the patient which may result in further delay in payment for these tests.

We expect to incur operating losses for the near-term and may need to raise additional capital in order to fund our operations. If we are unable to achieve our revenue growth objectives and successfully manage our costs, we may not be able to achieve profitability.

We believe that the keys to our future growth will be to increase billable test volumes, achieve broad reimbursement coverage for our tests from third-party payers, drive down the price for genetic analysis and interpretation, steadily increase the amount of genetic content we offer, consistently improve the client experience, drive physician and patient utilization of our website for ordering and delivery of results and increase the number of strategic partners working with us to add value for our clients.

Proposed merger with ArcherDX

On June 21, 2020, we, Apollo Merger Sub A Inc., a Delaware corporation and a wholly-owned subsidiary of Invitae ("Merger Sub A"), Apollo Merger Sub B LLC, a Delaware limited liability company and a wholly-owned subsidiary of Invitae ("Merger Sub B"), ArcherDX, and Kyle Lefkoff, solely in his capacity as holders’ representative, entered into an Agreement and Plan of Merger and Plan of Reorganization that provides for the acquisition of ArcherDX by Invitae. Subject to approval of Invitae’s stockholders and the satisfaction or (to the extent permitted by law) waiver of certain other closing conditions, Invitae will acquire ArcherDX through a two-step merger. Merger Sub A will merge with and into ArcherDX, with ArcherDX surviving the merger and becoming a wholly owned subsidiary of Invitae, referred to as the first merger. Promptly following the first merger, ArcherDX will merge with and into Merger Sub B, with Merger Sub B surviving as a wholly owned subsidiary of Invitae, referred to as the second merger. Such first merger and second merger are referred to collectively as the merger or the transaction.

Under the terms of the agreement, we will acquire ArcherDX for upfront consideration consisting of 30.0 million shares of Invitae common stock and $325.0 million in cash, plus up to an additional 27.0 million shares of Invitae common stock payable in connection with the achievement of certain milestones. The transaction is expected to close in several months from the signing of the definitive agreement, subject to customary closing conditions including approval by our stockholders. In connection with the proposed transaction with ArcherDX, we entered into a definitive agreement to sell $275.0 million in common stock in a private placement at a price of $16.85 per share. The private placement is expected to close concurrently with the proposed merger, subject to the satisfaction of customary closing conditions. The proceeds from the private placement are expected to be used to fund a portion of the cash consideration payable in the proposed merger with ArcherDX. In addition, we have entered into a debt commitment letter for up to a $200.0 million senior secured term loan facility, subject to completion of certain customary closing conditions. In connection with the credit facility, we will issue warrants to purchase 1.0 million shares of our common stock with an exercise price of $16.85 per share subject to the funding of the term loan facility. The term loan facility is available (i) to finance, in whole or in part, the proposed merger, (ii) to pay fees, costs and expenses related to the proposed merger, the debt financing and the other transactions related to the proposed merger and (iii) for other general working capital purposes. The closing of the private placement and the funding of the senior secured credit facility are expected to occur concurrently with the closing of the proposed merger.

Impact of COVID-19

Our test volumes decreased significantly in the second half of March 2020 as compared to the first few months of 2020 as a result of COVID-19 and related limitations and priorities across the healthcare system. While it is too early to predict the full impact COVID-19 will have on our business, our test volumes have increased in April, May and June 2020 from the low in March 2020, although we are currently still experiencing reduced test volumes and changes in product mix due to the impact of COVID-19. We expect COVID-19 to have a material impact on our financial results for at least the next quarter and for the foreseeable future. We have reviewed and adjusted for the impact of COVID-19 on our estimates related to revenue recognition and expected credit losses. In response to the pandemic we have implemented measures to protect the health of all of our employees during this time with additional measures in place to better protect our on-site lab production and support teams. Our production facilities currently remain fully operational. While we have not experienced significant disruption in our supply chain and we do not yet know the full impact COVID-19 will have on our supply chain, we have increased our inventory on hand to respond to potential future disruptions that may occur.

Many announced healthcare guidelines call for a shift of regular physician visits and healthcare delivery activities to remote/telehealth formats. This is particularly important for patients who, despite the fall-out from COVID-19, continue to be diagnosed with critical diseases, like cancer, and for women who are pregnant or are
trying to conceive. We believe our investments in new access platforms and technologies will position us well to provide a range of testing to clinicians and patients using a “clinical care from afar” model. An example is our rollout in April 2020 of our Gia telehealth platform. Gia, developed by Clear Genetics which we acquired in 2019, expands access to remote interaction between patients and clinicians as well as direct ordering of genetic tests. Such access helped to counteract some of the adverse in-office impacts of COVID-19, allowing continuation of key testing categories in a safe environment.

Given the unknown duration and extent of COVID-19’s impact on our business, and the healthcare system in general, we are adapting our spending and investment levels to evolving market conditions, including efforts to focus operating expense on increasing gross profit, putting additional hiring on hold and reducing headcount in certain areas, otherwise managing cash burn, and focusing commercial execution on workflows that support remote ordering, online support and telehealth. Approximately 8% of our workforce as of March 2020 was impacted by a reduction in force in April 2020 in an initiative to manage costs and cash burn, which resulted in one-time costs in the second quarter of 2020 of $3.8 million. In addition, effective May 2020, we reduced the salaries of our named executive officers by approximately 20%.

Factors affecting our performance

Number of billable tests

The growth in our test revenue is tied to the number of tests for which we bill third-party payers, institutions, partners or patients, which we refer to as billable tests. We typically bill for our services following delivery of the billable test report derived from testing samples and interpreting the results. We incur the expenses associated with a test in the period in which the test is processed regardless of when payment is received with respect to that test. We believe the number of billable tests in any period is the most important indicator of the growth in our test revenue, and with time, this will translate into the number of customers we add to our platform.

Success obtaining and maintaining reimbursement

Our ability to increase the number of billable tests and our revenue will depend in part on our success achieving broad reimbursement coverage and laboratory service contracts for our tests from third-party payers and agreements with institutions and partners. Reimbursement may depend on a number of factors, including a payer’s determination that a test is appropriate, medically necessary and cost-effective, as well as whether we are in contract, where we get paid more consistently and at higher rates. Because each payer makes its own decision as to whether to establish a policy or enter into a contract to reimburse for our testing services and specific tests, seeking these approvals is a time-consuming and costly process. In addition, clinicians and patients may decide not to order our tests if the cost of the test is not covered by insurance. Because we require an ordering physician to requisition a test, our revenue growth also depends on our ability to successfully promote the adoption of our testing services and expand our base of ordering clinicians. We believe that establishing coverage and obtaining contracts from third-party payers is an important factor in gaining adoption by ordering clinicians. Our arrangements for laboratory services with payers cover approximately 295 million lives, comprised of Medicare, all national commercial health plans, and Medicaid in most states, including California (Medi-Cal), our home state.

In cases where we have established reimbursement rates with third-party payers, we face additional challenges in complying with their procedural requirements for reimbursement. These requirements may vary from payer to payer, and it may be time-consuming and require substantial resources to meet these requirements. We may also experience delays in or denials of coverage if we do not adequately comply with these requirements. In addition, we have experienced, and may continue to experience, delays in reimbursement when we transition to being an in-network provider with a payer.

We expect to continue to focus our resources on increasing adoption of, and expanding coverage and reimbursement for, our current tests, tests provided by companies we acquire and any future tests we may develop. However, if we are not able to continue to obtain and maintain adequate reimbursement from third-party payers, institutions and partners for our testing services and expand the base of clinicians and patients ordering our tests, we may not be able to effectively increase the number of billable tests or our revenue.

Ability to lower the costs associated with performing our tests

Reducing the costs associated with performing our genetic tests is both a focus and a strategic objective of ours. Over the long term, we will need to reduce the cost of raw materials by improving the output efficiency of our assays and laboratory processes, modifying our platform-agnostic assays and laboratory processes to use materials and technologies that provide equal or greater quality at lower cost, improve how we manage our
materials, port some tests onto a next generation sequencing platform and negotiate favorable terms for our materials purchases. Our acquisition of Singular Bio is a component of this objective, and we expect the technology acquired in this transaction, once developed, to help decrease the costs associated with our NIPS offering. We also intend to continue to design and implement hardware and software tools that are designed to reduce personnel-related costs for both laboratory and clinical operations/medical interpretation by increasing personnel efficiency and thus lowering labor costs per test. Finally, we will need to reduce our costs of providing tests internationally to enable us to expand more rapidly outside of the United States.

**Ability to expand our genetic content**

Our focus on reducing the average cost per test will have a countervailing force — increasing the number of tests we offer and the content of each test. We intend to continue to expand our test menus by steadily releasing additional genetic content for the same or lower prices per test, ultimately leading to affordable whole genome services. The breadth and flexibility of our offering will be a critical factor in our ability to address new markets, including internationally, for genetic testing services. Both of these, in conjunction with our continued focus on strategic partnerships, will be important to our ability to continue to grow the volume of billable tests we deliver.

**Investment in our business and timing of expenses**

We plan to continue to invest in our genetic testing and information management business. We deploy state-of-the-art and costly technologies in our genetic testing services, and we intend to continue to scale our infrastructure, including our testing capacity and information systems. We also expect to incur software development costs as we seek to further automate our laboratory processes and our genetic interpretation and report sign-out procedures, scale our customer service capabilities to improve our customers' experience, and expand the functionality of our website. We will incur costs related to marketing and branding as we spread our initiatives beyond our current customer base and focus on providing access to customers through our website. We have hired additional personnel as necessary to support anticipated growth, including software engineers, sales and marketing personnel, billing personnel, research and development personnel, medical specialists, biostatisticians and geneticists. We will also incur additional costs related to the expansion of our production facilities in San Francisco and Irvine to accommodate growth and as we expand internationally. In addition, we expect to incur ongoing expenses as a result of operating as a public company. The expenses we incur may vary significantly by quarter as we focus on building out different aspects of our business.

**How we recognize revenue**

We generally recognize revenue on an accrual basis, which is when a customer obtains control of the promised goods or services, typically a test report. Accrual amounts recognized are based on estimates of the consideration that we expect to receive and such estimates are adjusted and subsequently recorded until fully settled. Changes to such estimates may increase or decrease revenue recognized in future periods. Revenue from our tests may not be equal to billed amounts due to a number of factors, including differences in reimbursement rates, the amounts of patient copayments, the existence of secondary payers and claim denials.

**Financial overview**

**Revenue**

We primarily generate revenue from the sale of our tests, which provide the analysis and associated interpretation of the sequencing of parts of the genome. Clients are billed upon delivery of test results. Our ability to increase our revenue will depend on our ability to increase our market penetration, obtain contracted reimbursement coverage from third-party payers, sign contracts with institutions and partners, and increase the rate at which we are paid for tests performed.

**Cost of revenue**

Cost of revenue reflects the aggregate costs incurred in delivering test results to clinicians and patients and includes expenses for materials and supplies, personnel-related costs, equipment and infrastructure expenses associated with testing and allocated overhead including rent, equipment depreciation, amortization of acquired intangibles and utilities. Costs associated with performing our tests are recorded as the patient's sample is processed. We expect cost of revenue to generally increase in line with the increase in the number of tests we perform, however we expect future increases in amortization of acquired intangible assets which is not dependent on sample volume. We anticipate our cost per test will generally decrease over time due to the efficiencies we
expect to gain as test volume increases and from automation and other cost reductions, although the cost per test may fluctuate from quarter to quarter. These reductions in cost per test will be likely be offset by new tests which often have a higher cost per test during the introductory phases before we are able to gain efficiencies.

**Operating expenses**

Our operating expenses are classified into three categories: research and development, selling and marketing, and general and administrative. For each category, the largest component is personnel-related costs, which include salaries, employee benefit costs, bonuses, commissions, as applicable, and stock-based compensation expense.

**Research and development**

Research and development expenses represent costs incurred to develop our technology and future tests. These costs are principally for process development associated with our efforts to expand the number of genes we can evaluate in our tests and with our efforts to lower the cost of performing our tests. In addition, we incur process development costs to further develop the software we use to operate our laboratory, analyze the data it generates, process customer orders, enable ease of customer ordering, deliver reports and automate our business processes. These costs consist of personnel-related costs, laboratory supplies and equipment expenses, consulting costs and allocated overhead including rent, information technology, equipment depreciation, amortization of intangible assets and utilities.

We expense all research and development costs in the periods in which they are incurred. Our research and development expenses have increased as we continued our efforts to develop additional tests, made investments to reduce testing costs, streamlined our technology to provide patients access to testing, scaled our business domestically and internationally and acquired and integrated new technologies. In the near term, we expect these expenses to moderate as we continue to monitor spending in response to reduced test volume related to COVID-19, although costs could fluctuate significantly from quarter to quarter, specifically related to our stock-based compensation.

**Selling and marketing**

Selling and marketing expenses consist of personnel-related costs, including commissions, client service expenses, advertising and marketing expenses, educational and promotional expenses, market research and analysis, and allocated overhead including rent, information technology, equipment depreciation, amortization of acquired intangibles, and utilities. We will continue to moderate our marketing and advertising spending in response to COVID-19.

**General and administrative**

General and administrative expenses include executive, finance and accounting, billing and collections, legal and human resources functions as well as other administrative costs. These expenses include personnel-related costs; audit, accounting and legal expenses; consulting costs; allocated overhead including rent, information technology, equipment depreciation, and utilities; costs incurred in relation to our co-development agreements; changes in the fair value of contingent consideration; and post-combination expenses incurred in relation to companies we acquire. We will continue to prudently manage our general and administrative expenses in the second half of 2020 in our response to COVID-19.

**Other income (expense), net**

Other income (expense), net, primarily consists of adjustments to the fair value of our stock payable liabilities arising from business combinations and we expect it to fluctuate significantly from period to period due to the volatility of our common stock. Other income (expense), net also includes income generated from our cash equivalents and marketable securities and amounts received under the CARES Act.

**Interest expense**

Interest expense is attributable to debt financing, including convertible senior notes issued in September 2019 ("Convertible Senior Notes"), and finance leases. See Note 8, “Commitments and contingencies” in the Notes to Condensed Consolidated Financial Statements included elsewhere in this report.
Income tax benefit

The income tax benefit is comprised of changes in our deferred income taxes and associated valuation allowances resulting from business combinations.

Critical accounting policies and estimates

Management’s discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. The preparation of these financial statements requires us to make judgments, estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenue generated and expenses incurred during the reporting periods. We evaluate our estimates on an ongoing basis. Our estimates are based on current facts, our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions and any such differences may be material. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management’s judgments and estimates.

There have been no material changes to our critical accounting policies and estimates as compared to the critical accounting policies and estimates described in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

Results of operations

Three Months Ended June 30, 2020 and 2019

The following sets forth our consolidated statements of operations data for each of the periods indicated (in thousands, except percentage changes). Our historical results are not necessarily indicative of our results of operations to be expected for any future period.

<table>
<thead>
<tr>
<th></th>
<th>Three Months Ended June 30,</th>
<th>Dollar Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2019</td>
<td></td>
</tr>
<tr>
<td>Revenue:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test revenue</td>
<td>$45,099</td>
<td>$52,302</td>
<td>$(7,203)</td>
</tr>
<tr>
<td>Other revenue</td>
<td>1,092</td>
<td>1,173</td>
<td>(81)</td>
</tr>
<tr>
<td>Total revenue</td>
<td>46,191</td>
<td>53,475</td>
<td>(7,284)</td>
</tr>
<tr>
<td>Cost of revenue</td>
<td>42,952</td>
<td>28,006</td>
<td>14,946</td>
</tr>
<tr>
<td>Research and development</td>
<td>74,963</td>
<td>25,302</td>
<td>49,661</td>
</tr>
<tr>
<td>Selling and marketing</td>
<td>39,520</td>
<td>30,779</td>
<td>8,741</td>
</tr>
<tr>
<td>General and administrative</td>
<td>30,838</td>
<td>21,274</td>
<td>9,564</td>
</tr>
<tr>
<td>Loss from operations</td>
<td>(142,082)</td>
<td>(51,886)</td>
<td>(90,196)</td>
</tr>
<tr>
<td>Other income (expense), net</td>
<td>(21,436)</td>
<td>1,381</td>
<td>(22,817)</td>
</tr>
<tr>
<td>Interest expense</td>
<td>(5,485)</td>
<td>(2,121)</td>
<td>(3,364)</td>
</tr>
<tr>
<td>Net loss before taxes</td>
<td>(169,003)</td>
<td>(52,626)</td>
<td>(116,377)</td>
</tr>
<tr>
<td>Income tax benefit</td>
<td>(2,600)</td>
<td>(3,950)</td>
<td>1,350</td>
</tr>
<tr>
<td>Net loss</td>
<td>$ (166,403)</td>
<td>$ (48,676)</td>
<td>$ (117,727)</td>
</tr>
</tbody>
</table>

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Revenue

The decrease in total revenue of $7.3 million for the three months ended June 30, 2020 compared to the same period in 2019 was due primarily to product mix and pricing. Billable test volumes increased to approximately 113,000 in the three months ended June 30, 2020 compared to 111,000 in the same period of 2019, an increase of 2 percent. While our test volumes slightly increased in comparison to the prior year period, we began to see a significant decrease in the second half of March 2020 as a result of COVID-19. Our test volumes continued to be impacted through the second quarter. Average revenue per test decreased to $399 per test in the three months ended June 30, 2020 compared to $471 per test in the comparable prior period primarily due to changes in payer and product mix, as well as reductions in pricing for some payers as we focus on providing cost effective genetic testing.

Cost of revenue

The increase in the cost of revenue of $14.9 million for the three months ended June 30, 2020 compared to the same period in 2019 was primarily due to increased costs per sample as well as increased test volume, partially offset by the effect of cost efficiencies. For the three months ended June 30, 2020, the number of samples accessioned increased to 120,000 from 111,000 for the same period in 2019. Cost per sample accessioned was $358 in the three months ended June 30, 2020 compared to $252 for the same period in 2019. The cost per sample accessioned increased primarily due to an increase in amortization of acquired intangible assets of $4.1 million as well as changes in product mix. These increases were partially offset by production improvements which resulted in material efficiencies and automation and software improvements which reduced the medical interpretation time per report.

Research and development

The increase in research and development expense of $49.7 million for the three months ended June 30, 2020 compared to the same period in 2019 was due to the growth of the business as well as for costs related to our acquisition of Singular Bio, Inc. in June 2019 and Diploid in March 2020. The increase primarily consisted of the following elements as we invest in research and development initiatives as we grow: personnel-related costs increased by $47.7 million, principally reflecting increased headcount as well as $33.4 million of stock-based compensation related to equity awards granted to new employees who joined Invitae in connection with our acquisitions of Singular Bio and Diploid as compared to $2.6 million in the prior year period, an increase in technology costs of $1.3 million, and an increase in professional fees of $1.3 million. These increases were offset by an increase of $2.3 million in allocations of resources from research and development to cost of revenue to support the increase in production volumes as compared to the prior year period.

Selling and marketing

The increase in selling and marketing expense of $8.7 million for the three months ended June 30, 2020 compared to the same period in 2019 was due primarily to the growth of the business and increased spending on marketing initiatives and principally consisted of the following elements: personnel-related costs increased by $7.8 million primarily reflecting increased headcount and includes an increase in sales commissions of $2.2 million, $1.6 million due to increases in marketing costs principally for branding initiatives and advertising and allocated technology and facilities-related expenses increased by $1.2 million. These increases were offset by decreases in travel-related costs due to COVID-19 of $2.1 million.

General and administrative

The increase in general and administrative expense of $9.6 million for the three months ended June 30, 2020 compared to the same period in 2019 was due primarily to the growth of the business and the effect of our business acquisitions and principally consisted of the following elements: personnel-related costs increased by $5.1 million; a $4.8 million increase in fair value adjustments to our contingent consideration obligations; a $2.7 million increase in legal and accounting services which was primarily due to increased acquisition-related transaction costs incurred in 2020 related to our proposed transaction with ArcherDX; a $0.9 million increase in professional fees; and a $0.8 million increase in information technology expenses for software licenses and related expenses.

These cost increases were partially offset by a decrease in post-combination expense related to our acquisitions of $2.7 million, an increase of $1.7 million in allocations of technology and facilities-related expenses to other functional areas, as well as a $0.6 million decrease in costs related to our co-development agreements.
Other income (expense), net

The increase in other expense, net of $22.8 million for the three months ended June 30, 2020 compared to the same period in 2019 was due principally to fair value adjustments related to our stock payable liabilities of $25.4 million due to the increase in the price of our common stock during the period. The increase was partially offset by increases in interest income generated on our cash equivalents and marketable securities and $3.8 million received under the CARES Act.

Interest expense

The increase in interest expense of $3.4 million for the three months ended June 30, 2020 compared to the same period in 2019 was due to increased debt outstanding compared to the prior year period.

Income tax benefit

The decrease in income tax benefit of $1.4 million was due to the net deferred tax liabilities assumed in connection with our acquisition of YouScript of $2.6 million recognized during the three months ended June 30, 2020 as compared to $4.0 million assumed in our acquisition of Singular Bio in June 2019.

Six Months Ended June 30, 2020 and 2019

The following sets forth our consolidated statements of operations data for each of the periods indicated (in thousands, except percentage changes). Our historical results are not necessarily indicative of our results of operations to be expected for any future period.

<table>
<thead>
<tr>
<th></th>
<th>Six Months Ended June 30,</th>
<th>Dollar Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2019</td>
<td></td>
</tr>
<tr>
<td>Revenue:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test revenue</td>
<td>$108,177</td>
<td>$91,921</td>
<td>$16,256</td>
</tr>
<tr>
<td>Other revenue</td>
<td>2,262</td>
<td>2,107</td>
<td>155</td>
</tr>
<tr>
<td>Total revenue</td>
<td>110,439</td>
<td>94,028</td>
<td>16,411</td>
</tr>
<tr>
<td>Cost of revenue</td>
<td>83,374</td>
<td>49,260</td>
<td>34,114</td>
</tr>
<tr>
<td>Research and development</td>
<td>130,631</td>
<td>43,296</td>
<td>87,335</td>
</tr>
<tr>
<td>Selling and marketing</td>
<td>81,640</td>
<td>54,972</td>
<td>26,668</td>
</tr>
<tr>
<td>General and administrative</td>
<td>54,660</td>
<td>34,593</td>
<td>20,067</td>
</tr>
<tr>
<td>Loss from operations</td>
<td>(239,866)</td>
<td>(88,093)</td>
<td>(151,773)</td>
</tr>
<tr>
<td>Other income (expense), net</td>
<td>(16,728)</td>
<td>2,019</td>
<td>(18,747)</td>
</tr>
<tr>
<td>Interest expense</td>
<td>(10,936)</td>
<td>(4,229)</td>
<td>(6,707)</td>
</tr>
<tr>
<td>Net loss before taxes</td>
<td>(267,530)</td>
<td>(90,303)</td>
<td>(177,227)</td>
</tr>
<tr>
<td>Income tax benefit</td>
<td>(2,600)</td>
<td>(3,950)</td>
<td>1,350</td>
</tr>
<tr>
<td>Net loss</td>
<td>$ (264,930)</td>
<td>$ (86,353)</td>
<td>$(178,577)</td>
</tr>
</tbody>
</table>

Revenue

The increase in total revenue of $16.4 million for the six months ended June 30, 2020 compared to the same period in 2019 was due primarily to increased test volume offset by changes in product mix. Billable test volumes increased to approximately 264,000 in the six months ended June 30, 2020 compared to 198,000 in the same period of 2019, an increase of 33 percent, primarily due to growth in the first quarter of 2020 as compared to the prior year period. While our test volumes increased during the six months ended June 30, 2020 as compared to the prior year period, we began to see a significant decrease in the second half of March 2020 as a result of COVID-19 and our test volumes continued to be impacted through the second quarter. Average revenue per test decreased to $410 per test in the six months ended June 30, 2020 compared to $464 per test in the comparable prior period primarily due to changes in payer and product mix, as well as reductions in pricing for some payers as we focus on providing cost effective genetic testing.

Cost of revenue

The increase in the cost of revenue of $34.1 million for the six months ended June 30, 2020 compared to the same period in 2019 was primarily due to costs associated with increased test volume and increased cost per
sample, partially offset by the effect of cost efficiencies. For the six months ended June 30, 2020, the number of samples accessioned increased to 274,000 from 205,000 for the same period in 2019. Cost per sample accessioned was $304 in the six months ended June 30, 2020 compared to $240 for the same period in 2019. The increase in cost per sample accessioned in the six months ended June 30, 2020 was primarily attributable to an increase in amortization of acquired intangible assets of $6.4 million as well as changes in product mix. These increases were partially offset by production improvements which resulted in material efficiencies and automation and software improvements which reduced the medical interpretation time per report.

**Research and development**

The increase in research and development expense of $87.3 million for the six months ended June 30, 2020 compared to the same period in 2019 was due to the growth of the business as well as to costs related to our acquisitions of Singular Bio in June 2019 and Diploid in March 2020. The increase principally consisted of the following elements as we invest in research and development initiatives as we grow: personnel-related costs increased by $82.8 million, primarily reflecting increased headcount as well as $52.2 million of stock-based compensation related to equity awards granted to new employees who joined Invitae in connection with our acquisitions of Singular Bio and Diploid as compared to $2.6 million in the prior year period; technology expense increased by $2.8 million primarily reflecting increased headcount; professional fees increased by $2.5 million, general lab expenses increased by $1.3 million and occupancy expenses increased by $0.9 million.

These cost increases were partially offset by allocations of resources from research and development to cost of revenue, resulting from increased test volumes, and allocations from other functional areas which reduced research and development expense by $3.4 million.

**Selling and marketing**

The increase in selling and marketing expense of $26.7 million for the six months ended June 30, 2020 compared to the same period in 2019 was due primarily to the growth of the business and our increased spending on marketing initiatives prior to our cut backs in the second quarter of 2020 as a response to COVID-19. The increase in selling and marketing expenses principally consisted of the following elements: personnel-related costs increased by $18.7 million reflecting increased headcount and included an increase in sales commissions of $5.2 million; a $4.9 million increase in marketing costs principally for branding initiatives and advertising; and allocated technology and facilities-related expenses increased by $2.4 million.

**General and administrative**

The increase in general and administrative expense of $20.1 million for the six months ended June 30, 2020 compared to the same period in 2019 was due primarily to the growth of the business and the effect of our business acquisitions and principally consisted of the following elements: personnel-related costs increased by $11.9 million principally due to increased headcount; legal and accounting services increased by $6.0 million which was primarily due to increased acquisition-related transaction costs incurred in 2020 related to Diploid, Genelex, YouScript and ArcherDX; a $4.7 million increase in fair value adjustments to our contingent consideration obligations; professional fees increased by $1.4 million; information technology costs increased by $1.2 million due to software licenses and related expenses; and an increase in occupancy costs of $0.8 million.

These cost increases were partially offset by an increase of $4.6 million in allocations of technology and facilities-related expenses to other functional areas, a decrease in post-combination expense related to our acquisitions of $2.7 million, as well as a decrease of $0.9 million in costs related to our co-development agreements.

**Other income (expense), net**

The increase in other expense, net of $18.7 million for the six months ended June 30, 2020 compared to other income, net in the same period in 2019 was due principally to fair value adjustments related to our stock payable liabilities of $21.7 million due to the increase in the price of our common stock during the period partially offset by $3.8 million received under the CARES Act.

**Interest expense**

The increase in interest expense of $6.7 million for the six months ended June 30, 2020 compared to the same period in 2019 was due principally to increased debt outstanding as compared to the prior year period.
### Income tax benefit

The decrease in income tax benefit of $1.4 million was due to the net deferred tax liabilities assumed in connection with our acquisition of YouScript of $2.6 million as compared to $4.0 million assumed in our acquisition of Singular Bio in June 2019.

### Liquidity and capital resources

#### Liquidity and capital expenditures

We have incurred net losses since our inception. For the six months ended June 30, 2020 and 2019, we had net losses of $264.9 million and $86.4 million, respectively, and we expect to incur additional losses in the near-term future. At June 30, 2020, we had an accumulated deficit of $1.0 billion. While our revenue has increased over time, we may never achieve revenue sufficient to offset our expenses.

Since inception, our operations have been financed primarily by fees collected from our customers, net proceeds from sales of our capital stock as well as borrowing from debt facilities and the issuance of Convertible Senior Notes.

In March 2019, we issued, in an underwritten public offering, an aggregate of 10.4 million shares of our common stock at a price of $19.00 per share, for gross proceeds of $196.7 million and net proceeds of $184.5 million. During 2019, we issued 0.8 million shares of common stock at an average price of $25.71 per share in "at the market" offerings for aggregate proceeds of $20.2 million and net proceeds of $19.5 million. In April 2020, we issued, in an underwritten public offering, an aggregate of 20.4 million shares of our common stock at a price of $9.00 per share, for gross proceeds of $184.0 million and net proceeds of approximately $173.0 million after deducting underwriting discounts and commissions and offering expenses. In June 2020, we issued approximately 2.6 million shares of common stock at an average price of $17.59 per share in an "at the market" offering for aggregate proceeds of $46.0 million and net proceeds of $44.5 million.

In September 2019, we issued $350.0 million of aggregate principal amount of Convertible Senior Notes which bear cash interest at a rate of 2.0% per year. Also in September 2019, we used the funds received through the issuance of our Convertible Senior Notes to settle our Note Purchase Agreement we entered into in November 2018.

In connection with the proposed transaction with ArcherDX, we have entered into a Securities Purchase Agreement with a syndicate of life sciences investors to sell $275.0 million in common stock in a private placement at a price of $16.85 per share. The private placement is expected to close concurrently with the proposed combination, subject to the satisfaction of customary closing conditions. Invitae has also entered into a fully committed credit facility for up to $200.0 million, subject to certain customary closing conditions. In addition, in connection with the credit facility, we agreed to issue to the lender on the closing date warrants to purchase 1.0 million shares of our common stock at an exercise price of $16.85 per share.

At June 30, 2020 and December 31, 2019, we had $428.5 million and $398.0 million, respectively, of cash, cash equivalents, restricted cash and marketable securities.

Our primary uses of cash are to fund our operations as we continue to grow our business, enter into partnerships and potentially to acquire businesses and technologies. Cash used to fund operating expenses is affected by the timing of when we pay expenses, as reflected in the change in our outstanding accounts payable and accrued expenses.

We have incurred substantial losses since our inception, and we expect to continue to incur losses in the near term. We believe our existing cash, cash equivalents and marketable securities as of June 30, 2020 and fees collected from the sale of our tests will be sufficient to meet our anticipated cash requirements for the foreseeable future.

We may need additional funding to finance operations prior to achieving profitability or should we make additional acquisitions. We regularly consider fundraising opportunities and will determine the timing, nature and size of future financings based upon various factors, including market conditions and our operating plans. We may in the future elect to finance operations by selling equity or debt securities or borrowing money. We also may elect to finance future acquisitions. In addition, the COVID-19 pandemic has caused disruption in the capital markets and could make financing more difficult and/or expensive and we may not be able to obtain such financing on terms acceptable to us or at all. If we issue equity securities, dilution to stockholders may result. Any equity securities issued may also provide for rights, preferences or privileges senior to those of holders of our common stock. If we raise funds by issuing additional debt securities, these debt securities would have rights, preferences and privileges senior to those of holders of our common stock. In addition, the terms of additional debt securities or borrowings...
could impose significant restrictions on our operations. If additional funding is required, there can be no assurance that additional funds will be available to us on acceptable terms on a timely basis, if at all. If we are unable to obtain additional funding when needed, we will need to curtail planned activities to reduce costs. Doing so will likely have an unfavorable effect on our ability to execute on our business plan and have an adverse effect on our business, results of operations and future prospects.

The following table summarizes our cash flows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Six Months Ended June 30,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
</tr>
<tr>
<td>Cash used in operating activities</td>
<td>$(122,754)</td>
</tr>
<tr>
<td>Cash provided by (used in) investing activities</td>
<td>$(82,617)</td>
</tr>
<tr>
<td>Cash provided by financing activities</td>
<td>$222,345</td>
</tr>
<tr>
<td>Net increase in cash, cash equivalents and restricted cash</td>
<td>$16,974</td>
</tr>
</tbody>
</table>

**Cash flows from operating activities**

For the six months ended June 30, 2020, cash used in operating activities of $122.8 million principally resulted from our net loss of $264.9 million and a $2.6 million income tax benefit generated from our acquisition of YouScript, partially offset by non-cash charges of $81.1 million for stock-based compensation, remeasurements of liabilities in connection with business combinations of $26.7 million, $14.5 million for depreciation and amortization and $7.3 million for amortization of debt discount and issuance costs related to our Convertible Senior Notes. The net effect on cash of changes in net operating assets was an increase of cash of $15.6 million.

For the six months ended June 30, 2019, cash used in operating activities of $61.1 million principally resulted from our net loss of $86.4 million, partially offset by non-cash charges of $19.5 million for stock-based compensation, $6.7 million for depreciation and amortization, and $4.0 million related to our income tax benefit. The net effect on cash of changes in net operating assets was an increase of cash of $2.1 million.

**Cash flows from investing activities**

For the six months ended June 30, 2020, cash used in investing activities of $82.6 million was due to net sales and maturities of marketable securities of $12.9 million partially offset by net cash used to acquire Diploid, Genelex and YouScript of $57.6 million and by cash used for purchases of property and equipment of $10.9 million.

For the six months ended June 30, 2019, cash provided by investing activities of $7.6 million was due to net maturities of marketable securities of $13.2 million and net cash acquired from the purchase of Singular Bio of $3.2 million, partially offset by cash used for purchases of property and equipment of $8.8 million.

**Cash flows from financing activities**

For the six months ended June 30, 2020, cash provided by financing activities of $222.3 million consisted of net proceeds from the public offerings of common stock of $217.5 million, cash received from issuances of common stock of $6.8 million, partially offset by finance lease principal payments of $1.2 million.

For the six months ended June 30, 2019, cash provided by financing activities of $188.6 million consisted of net proceeds from the public offering of common stock of $184.5 million and cash received from issuances of common stock totaling $5.1 million, including cash received from employee stock plan purchases of $2.6 million and exercises of stock options of $2.4 million. These cash inflows were partially offset by finance lease payments of $1.0 million.
Contractual obligations

The following table summarizes our contractual obligations, including interest, as of June 30, 2020 (in thousands):

<table>
<thead>
<tr>
<th>Contractual obligations:</th>
<th>Remainder of 2020</th>
<th>2021 and 2022</th>
<th>2023 and 2024</th>
<th>2025 and beyond</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating leases</td>
<td>$5,749</td>
<td>$22,615</td>
<td>$20,984</td>
<td>$18,459</td>
<td>$67,807</td>
</tr>
<tr>
<td>Finance leases</td>
<td>741</td>
<td>1,223</td>
<td>—</td>
<td>—</td>
<td>1,964</td>
</tr>
<tr>
<td>Convertible Senior Notes</td>
<td>—</td>
<td>—</td>
<td>350,000</td>
<td>—</td>
<td>350,000</td>
</tr>
<tr>
<td>Purchase commitments</td>
<td>1,909</td>
<td>3,150</td>
<td>861</td>
<td>108</td>
<td>6,028</td>
</tr>
<tr>
<td>Total</td>
<td>$8,399</td>
<td>$26,988</td>
<td>$371,845</td>
<td>$18,567</td>
<td>$425,799</td>
</tr>
</tbody>
</table>

See Note 8, "Commitments and contingencies" in the Notes to Condensed Consolidated Financial Statements for additional details regarding our leases, Convertible Senior Notes and purchase commitments.

Off-balance sheet arrangements

We have not entered into any off-balance sheet arrangements.

Recent accounting pronouncements

See "Recent accounting pronouncements" in Note 2, "Summary of significant accounting policies" in the Notes to Condensed Consolidated Financial Statements included elsewhere in this report for a discussion of recently adopted accounting pronouncements and accounting pronouncements not yet adopted, and their expected effect on our financial position and results of operations.

ITEM 3. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to market risks in the ordinary course of our business. These risks primarily relate to interest rates. Our cash, cash equivalents, restricted cash and marketable securities totaled $428.5 million at June 30, 2020, and consisted of bank deposits, money market funds, U.S. treasury notes, and U.S. government agency securities. Such interest-bearing instruments carry a degree of risk; however, because our investments are primarily high-quality credit instruments with short-term durations with high-quality institutions, we have not been exposed to, nor do we anticipate being exposed to, material risks due to changes in interest rates. At June 30, 2020, a hypothetical 1.0% (100 basis points) increase or decrease in interest rates would not have resulted in a material change in the fair value of our cash equivalents and portfolio of marketable securities. Fluctuations in the value of our cash equivalents and portfolio of marketable securities caused by a change in interest rates (gains or losses on the carrying value) are recorded in other comprehensive gain (loss) and are realized only if we sell the underlying securities prior to maturity or declines in fair value are determined to be other-than-temporary.

Although our Convertible Senior Notes are based on a fixed rate, changes in interest rates could impact their fair market value. As of June 30, 2020, the fair market value of the Convertible Senior Notes was $406.9 million. For additional information about the Convertible Senior Notes, see Note 8, "Commitments and contingencies" in Notes to Condensed Consolidated Financial Statements in Part I, Item 1 of this Quarterly Report.

(a) Evaluation of disclosure controls and procedures

We maintain "disclosure controls and procedures," as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, or Exchange Act, that are designed to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial and accounting officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognized that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Our disclosure controls and procedures have been designed to meet reasonable assurance standards. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any disclosure controls and procedures also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Based on their evaluation as of the end of the period covered by this Quarterly Report on Form 10-Q, our Chief Executive Officer (our principal executive officer) and Chief Financial Officer (our principal financial officer) have concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

(b) Changes in internal control over financial reporting

During the quarterly period covered by this Quarterly Report on Form 10-Q, there were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.
PART II — Other Information

ITEM 1. Legal Proceedings.

We are not a party to any material legal proceedings on the date of this report. We may from time to time become involved in legal proceedings arising in the ordinary course of business, and the resolution of any such claims could be material.

ITEM 1A. Risk Factors.

Risks Related to the Proposed Merger with ArcherDX

The proposed merger is subject to conditions, some or all of which may not be satisfied, or completed on a timely basis, if at all. Failure to complete the proposed merger could have a material adverse effect on us.

The completion of the proposed merger is subject to a number of conditions, including, among other things, receipt of the approval of our stockholders, which make the completion and timing of the completion of the proposed merger uncertain. The failure to satisfy all of the required conditions could delay the completion of the proposed merger for a significant period of time or prevent it from occurring at all. Any delay in completing the proposed merger could cause us not to realize, or not to realize on the expected timeline, some or all of the benefits that we expect to achieve if the proposed merger is successfully completed within the expected timeframe. There can be no assurance that the conditions to the closing of the proposed merger will be satisfied or waived or that the proposed merger will be completed. Also, subject to limited exceptions, either we or ArcherDX may terminate the merger agreement if the proposed merger has not been completed by March 20, 2021.

If the proposed merger is not completed, our ongoing business may be materially adversely affected and, without realizing any of the benefits of having completed the proposed merger, we will be subject to a number of risks, including the following:

- the market price of our common stock could decline;
- if the merger agreement is terminated and we seek another acquisition, stockholders cannot be certain that we will be able to find a party willing to enter into a transaction with the same potential benefits or on terms equivalent to or more attractive than the terms that ArcherDX has agreed to in the merger agreement;
- time and resources, financial and other, committed by our management to matters relating to the proposed merger could otherwise have been devoted to pursuing other beneficial opportunities for our company;
- we may experience negative reactions from the financial markets or from customers, payers, suppliers, collaboration partners or employees; and
- we will be required to pay our costs relating to the proposed merger, such as legal, accounting, financial advisory and printing fees, whether or not the proposed merger is completed.

In addition, if the proposed merger is not completed, we could be subject to litigation related to any failure to complete the proposed merger or related to any enforcement proceeding commenced against us to perform our obligations under the merger agreement. Any of these risks could materially and adversely impact our business, financial condition, financial results and stock price.

Similarly, delays in the completion of the proposed merger could, among other things, result in additional transaction costs, loss of revenue or other negative effects associated with uncertainty about completion of the proposed merger and could materially and adversely impact our ongoing business, financial condition, financial results and stock price following the completion of the proposed merger.

The merger agreement contains provisions that limit our ability to pursue alternatives to the proposed merger and, in specified circumstances, could require us to make a substantial payment to ArcherDX.

The merger agreement contains certain provisions that restrict our ability to terminate the merger agreement. Further, even if our board of directors withdraws or qualifies its recommendation with respect to the approval of the proposed merger, unless the merger agreement is terminated in accordance with its terms, we will still be required to submit the proposal to approve the merger to a vote at a special meeting of our stockholders.
The merger agreement also provides for payment by us to ArcherDX of $30.0 million in cash in the event that the merger agreement is terminated (1) by either us or ArcherDX because our special meeting of stockholders has concluded and the required stockholder approval by our stockholders was not obtained or (2) by ArcherDX because our board of directors has made an adverse recommendation change.

Antitrust authorities may impose conditions that could have an adverse effect on us, ArcherDX or the combined company or could prevent completion of the proposed merger.

At any time before or after the completion of the proposed merger, and notwithstanding the termination of the Hart-Scott-Rodino Antitrust Improvements Act of 1976 waiting period, which occurred on July 15, 2020, applicable U.S. or foreign antitrust authorities or any state attorney general could take such action under the antitrust laws as such party deems necessary or desirable in the public interest. Such action could include, among other things, seeking to enjoin the completion of the proposed merger or seeking divestiture of substantial assets of the parties to the proposed merger. In addition, in some circumstances, a third party could initiate a private action under antitrust laws challenging, seeking to enjoin, or seeking to impose conditions on the proposed merger. Invitae and ArcherDX may not prevail and may incur significant costs in defending or settling any such action.

The merger consideration is not adjustable based on the market price of our common stock so the merger consideration at the closing of the proposed merger may have a greater or lesser value than at the time the merger agreement was signed.

The merger agreement provides that the number of shares of our common stock to be issued as merger consideration is determined as a ratio of the fully diluted shares of ArcherDX, and any changes in the market price of our common stock before the completion of the proposed merger will not affect the number of shares holders of ArcherDX capital stock will be entitled to receive pursuant to the merger agreement. Therefore, if before the completion of the proposed merger, the market price of our common stock increases from the market price at the time the merger agreement was signed, then holders of ArcherDX capital stock could receive merger consideration with substantially greater value for their shares of ArcherDX capital stock than the value of our common stock when we entered into the merger agreement.

We and ArcherDX are each subject to business uncertainties and contractual restrictions while the proposed merger is pending, which could adversely affect each party’s business and operations.

In connection with the pendency of the proposed merger, it is possible that some customers, suppliers, payers, collaboration partners and other persons with whom we and/or ArcherDX has a business relationship may delay or defer certain business decisions or might decide to seek to terminate, change or renegotiate their relationships with us or ArcherDX, as the case may be, as a result of the proposed merger or otherwise, which could negatively affect either party’s respective revenues, earnings and/or cash flows, as well as the market price of our common stock, regardless of whether the proposed merger is completed. The pending transaction could also divert management time and resources that could otherwise have been devoted to other opportunities that may have been beneficial to us or ArcherDX.

Under the terms of the merger agreement, ArcherDX is subject to certain restrictions on the conduct of its business prior to completing the proposed merger which may adversely affect its ability to execute certain of its business strategies, including the ability in certain cases to enter into or amend contracts, acquire or dispose of assets, incur indebtedness or incur capital expenditures. Such limitations could adversely affect ArcherDX's business and operations prior to the completion of the proposed merger.

Under the terms of the merger agreement, we are subject to a more limited set of restrictions on the conduct of our business prior to completing the proposed merger which may adversely affect our ability to execute certain of our business strategies, including the ability in certain cases to amend our organizational documents, pay dividends or distributions or repurchase shares of our common stock. Such limitations could adversely affect our business and operations prior to the completion of the proposed merger.

Each of the risks described above may be exacerbated by delays or other adverse developments with respect to the completion of the proposed merger.

Completion of the proposed merger will trigger change in control or other provisions in certain agreements to which ArcherDX is a party, which may have an adverse impact on our business and results of operations following completion of the proposed merger.

The completion of the proposed merger will trigger change in control and other provisions in certain agreements to which ArcherDX is a party. If we or ArcherDX is unable to negotiate waivers of those provisions, the counterparties may exercise their rights and remedies under the agreements, potentially terminating the
agreements or seeking monetary damages or equitable remedies. Even if we and ArcherDX are able to negotiate consents or waivers, the counterparties may require a fee for such waivers or seek to renegotiate the agreements on terms less favorable to ArcherDX or the combined company following completion of the proposed merger. Any of the foregoing or similar developments may have an adverse impact on our business and results of operations following completion of the proposed merger.

Uncertainties associated with the proposed merger may cause a loss of management personnel and other key employees, which could adversely affect our future business and operations following completion of the proposed merger.

We and ArcherDX are dependent on the experience and industry knowledge of our officers and other key employees to execute our respective business plans. Our success after the completion of the proposed merger will depend in part upon our ability to retain certain key management personnel and employees of Invitae and ArcherDX. Prior to completion of the proposed merger, current and prospective employees of Invitae and ArcherDX may experience uncertainty about their roles within Invitae following the completion of the proposed merger, which may have an adverse effect on the ability of each of Invitae and ArcherDX to attract or retain key management and other key personnel. In addition, no assurance can be given that we, after the completion of the proposed merger, will be able to attract or retain key management personnel and other key employees to the same extent that we and ArcherDX have previously been able to attract or retain our own respective employees.

Sales of substantial amounts of our common stock in the open market by former ArcherDX stockholders after the closing could depress our stock price.

Our common stock to be issued to stockholders of ArcherDX in connection with the proposed merger will be freely tradable without restrictions or further registration under the Securities Act of 1933, other than pursuant to a lock-up provisions in the merger agreement, which prevents the sale, transfer or other disposition of any shares of our common stock issued pursuant to the proposed merger, or any interest therein, for a period of 90 days following the closing of the proposed merger, which we refer to as the Lock-Up Restriction. If the proposed merger is completed and if ArcherDX’s former stockholders sell substantial amounts of our common stock in the public market following completion of the proposed merger and termination of the Lock-Up Restriction, the market price of our common stock may decrease. These sales might also make it more difficult for us to sell equity or equity-related securities at a time and price that we otherwise would deem appropriate.

We may be the target of transaction related lawsuits which could result in substantial costs and may delay or prevent the proposed merger from being completed. If the proposed merger is completed, we will also assume ArcherDX’s risks arising from various legal proceedings.

Securities class action lawsuits and derivative lawsuits are often brought against companies that have entered into merger agreements. Even if the lawsuits are without merit, defending against these claims can result in substantial costs and divert management time and resources. An adverse judgment could result in monetary damages, which could have a negative impact on Invitae’s and ArcherDX’s respective liquidity and financial condition. Additionally, if a plaintiff is successful in obtaining an injunction prohibiting completion of the proposed merger, then that injunction may delay or prevent the proposed merger from being completed, which may adversely affect Invitae’s and ArcherDX’s respective business, financial condition and results of operation. There can be no assurance that complaints will not be filed with respect to the proposed merger.

One of the conditions to completion of the proposed merger is the absence of any injunction or order being in effect that prohibits completion of the proposed merger. Accordingly, if a plaintiff is successful in obtaining any injunction or order prohibiting the completion of the proposed merger, then such injunction or order may prevent the proposed merger from being completed, or from being completed within the expected timeframe.

In addition, if we complete the proposed merger, we will assume ArcherDX’s risks arising from legal proceedings. In addition, following the closing of the proposed merger, the strategies or motivations of a party or parties with respect to actual or potential litigation against Invitae may change. We cannot predict with certainty the eventual outcome of ArcherDX’s pending or future legal proceedings and the ultimate outcome of such matters could be material to our results of operations, cash flows and financial condition following completion of the proposed merger.

We may waive one or more of the closing conditions to the merger agreement without re-soliciting stockholder approval of the proposed merger.

We may determine to waive, in whole or part, one or more of the conditions to closing the proposed merger prior to our being obligated to consummate the proposed merger. We currently expect to evaluate the materiality of any waiver and its effect on our stockholders in light of the facts and circumstances at the time, to determine
whether any amendment of the proxy statement/prospectus for the special meeting of stockholders called to approve the proposed merger or any re-solicitation of proxies is required in light of such waiver. Any determination whether to waive any condition to the proposed merger or to re-solicit stockholder approval or amending or supplementing the proxy statement/prospectus related thereto as a result of a waiver will be made by us at the time of such waiver based on the facts and circumstances as they exist at that time.

Risks related to our business and strategy

**We face risks related to health epidemics, including the recent COVID-19 pandemic, which could have a material adverse effect on our business and results of operations.**

Our business has been and could continue to be adversely affected by a widespread outbreak of contagious disease, including the recent pandemic of respiratory illness caused by a novel coronavirus known as COVID-19. Global health concerns relating to the COVID-19 pandemic have negatively affected the macroeconomic environment, and the pandemic has significantly increased economic volatility and uncertainty.

The pandemic has resulted in government authorities implementing numerous measures to try to contain the virus, such as travel bans and restrictions, quarantines, shelter-in-place or stay-at-home orders, and business shutdowns. For example, our personnel located at our headquarters and other offices in California, elsewhere in the United States and in other countries, are currently subject to shelter-in-place or stay-at-home orders from state and local governments. These measures have adversely impacted and may further impact our employees and operations and the operations of our customers, suppliers and business partners, and may continue to negatively impact spending patterns, payment cycles and insurance coverage levels. These measures have adversely affected and may continue to adversely affect demand for our tests. Many of our customers, including hospitals and clinics, have suspended non-emergency appointments and services, which has resulted in a significant decrease in our test volume. Travel bans, restrictions and border closures have also impacted our ability to ship test kits to and receive samples from our customers. In addition, certain aspects of our business, such as laboratory processes, cannot be conducted remotely. These measures by government authorities may remain in place for a significant period of time, and even if they are lifted, they may be implemented again, as has been the case, if the COVID-19 pandemic is not contained or returns in the future. These measures are likely to continue to adversely affect our test volume, sales activities and results of operations.

The spread of COVID-19 has caused us to modify our business practices (including employee travel, mandating that all non-essential personnel work from home, temporary closures of our offices, cancellation of physical participation in sales activities, meetings, events and conferences and increasing inventories of certain supplies), and we may take further actions as may be required by government authorities or that we determine are in the best interests of our employees, customers and business partners. Such actions could also impact our ability to fully integrate businesses we have acquired and those we may acquire in the future. There is no certainty that such actions will be sufficient to mitigate the risks posed by the virus or otherwise be satisfactory to government authorities. If significant portions of our workforce are unable to work effectively, including due to illness, quarantines, social distancing, government actions or other restrictions in connection with the COVID-19 pandemic, our operations will be impacted.

The extent to which the COVID-19 pandemic continues to impact our business, results of operations and financial condition will depend on future developments, which are highly uncertain and cannot be predicted, including, but not limited to, the duration and spread of the pandemic, the actions to contain the virus and treat its impact, and how quickly and to what extent normal economic and operating activities can resume. The COVID-19 pandemic could limit the ability of our customers, suppliers and business partners to perform, including third-party payers’ ability to make timely payments to us during and following the pandemic. We may also experience a shortage of laboratory supplies or a suspension of services from other laboratories or third parties. Even after the COVID-19 pandemic has subsided, we may continue to experience an adverse impact to our business as a result of its global economic impact, including any recession that has occurred or may occur in the future.

Specifically, difficult macroeconomic conditions, such as decreases in per capita income and level of disposable income, increased and prolonged unemployment or a decline in consumer confidence as a result of the COVID-19 pandemic, as well as limited or significantly reduced points of access of our tests, could have a material adverse effect on the demand for our tests. Under difficult economic conditions, consumers may seek to reduce discretionary spending by forgoing our tests. Decreased demand for our tests, particularly in the United States, has negatively affected and could continue negatively affect our overall financial performance. Because a significant portion of our revenue is concentrated in the United States, where the impact of COVID-19 has been significant, the COVID-19 pandemic has had and could continue to have a disproportionately negative impact on our business and financial results.
There are no comparable recent events which may provide guidance as to the effect of the spread of COVID-19 and a pandemic, and, as a result, the ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. We do not yet know the full extent of COVID-19’s impact on our business, our operations, or the global economy as a whole. However, the effects could have a material impact on our results of operations, and we will continue to monitor the situation closely.

We expect to continue incurring significant losses, and we may not successfully execute our plan to achieve or sustain profitability.

We have incurred substantial losses since our inception. For the six months ended June 30, 2020, our net loss was $264.9 million. For the years ended December 31, 2019, 2018 and 2017, our net losses were $242.0 million, $129.4 million and $123.4 million, respectively. At June 30, 2020, our accumulated deficit was $1.0 billion. While our revenue has increased over time, we expect to continue to incur significant losses as we invest in our business. We incurred research and development expenses of $141.5 million, $63.5 million and $46.5 million in 2019, 2018, and 2017, respectively, and selling and marketing expenses of $122.2 million, $74.4 million, and $53.4 million in 2019, 2018, and 2017, respectively. We expect these losses may increase as we focus on scaling our business and operations and expanding our testing capabilities, which may also increase our operating expenses, and as we face decreases in test volume due to the impact of COVID-19. In addition, as a result of the integration of acquired businesses, we may be subject to unforeseen or additional expenditures, costs or liabilities. Our prior losses and expected future losses have had and may continue to have an adverse effect on our stockholders’ equity, working capital and stock price. Our failure to achieve and sustain profitability in the future would negatively affect our business, financial condition, results of operations and cash flows, and could cause the market price of our common stock to decline.

We began operations in January 2010 and commercially launched our initial assay in late November 2013; accordingly, we have a relatively limited operating history upon which you can evaluate our business and prospects. Our limited commercial history makes it difficult to evaluate our current business and makes predictions about our future results, prospects or viability subject to significant uncertainty. Our prospects must be considered in light of the risks and difficulties frequently encountered by companies in their early stage of development, particularly companies in new and rapidly evolving markets such as ours. These risks include an evolving and unpredictable business model and the management of growth. To address these risks, we must, among other things, increase our customer base; implement and successfully execute our business and marketing strategy; identify, acquire and successfully integrate companies, assets or technologies in areas that are complementary to our business strategy; successfully enter into other strategic collaborations or relationships; obtain access to capital on acceptable terms and effectively utilize that capital; identify, attract, hire, retain, motivate and successfully integrate additional employees; continue to expand, automate and upgrade our laboratory, technology and data systems; obtain, maintain and expand coverage and reimbursement by healthcare payers; provide rapid test turnaround times with accurate results at low prices; provide superior customer service; and respond to competitive developments. We cannot assure you that we will be successful in addressing these risks, and the failure to do so could have a material adverse effect on our business, prospects, financial condition and results of operations.

Our inability to raise additional capital on acceptable terms in the future may limit our ability to develop and commercialize new tests and expand our operations.

We expect capital expenditures and operating expenses to increase over the next several years as we expand our infrastructure, commercial operations, research and development and selling and marketing activities and pursue and integrate acquisitions. We believe our existing cash and cash equivalents as of June 30, 2020 and revenue from sales of our tests will be sufficient to meet our anticipated cash requirements for our currently-planned operations for the foreseeable future. We may raise additional capital to finance operations prior to achieving profitability, or should we make additional acquisitions. We may seek to raise additional capital through equity offerings, debt financings, collaborations or licensing arrangements. Additional funding may not be available to us on acceptable terms, or at all. If we raise funds by issuing equity securities, dilution to our stockholders would result. Any equity securities issued also may provide for rights, preferences or privileges senior to those of holders of our common stock. The terms of debt securities issued or borrowings, if available, could impose significant restrictions on our operations.

The incurrence of additional indebtedness or the issuance of certain equity securities could result in increased fixed payment obligations and could also result in restrictive covenants, such as limitations on our ability to incur additional debt or issue additional equity, limitations on our ability to acquire or license intellectual property rights, and other operating restrictions that could adversely affect our ability to conduct our business. In addition, the issuance of additional equity securities by us, or the possibility of such issuance, may cause the market price of our
common stock to decline. In the event that we enter into collaborations or licensing arrangements to raise capital, we may be required to accept unfavorable terms. These agreements may require that we relinquish license to a third party on unfavorable terms our rights to tests we otherwise would seek to develop or commercialize ourselves, or reserve certain opportunities for future potential arrangements when we might be able to achieve more favorable terms. If we are not able to secure additional funding when needed, we may have to delay, reduce the scope of or eliminate one or more research and development programs, selling and marketing initiatives, or potential acquisitions. In addition, we may have to work with a partner on one or more aspects of our tests or market development programs, which could lower the economic value of those tests or programs to our company.

We have acquired and may continue to acquire businesses or assets, form joint ventures or make investments in other companies or technologies that could harm our operating results, dilute our stockholders’ ownership, or cause us to incur debt or significant expense.

As part of our business strategy, we have pursued and expect to continue to pursue acquisitions of complementary businesses or assets, as well as technology licensing arrangements. We also may pursue strategic alliances that leverage our core technology and industry experience to expand our offerings or distribution, or make investments in other companies. As an organization, we have limited experience with respect to acquisitions as well as the formation of strategic alliances and joint ventures.

In 2017, we established a leading position in family health genetic information services through the strategic acquisition of reproductive health testing capabilities, which included our acquisition of Good Start Genetics, Inc., or Good Start, a molecular diagnostics company focused on preimplantation and carrier screening for inherited disorders, and CombiMatrix Corporation, a company specializing in prenatal diagnosis, miscarriage analysis and pediatric developmental disorders. In 2017 we also acquired AltaVoice, formerly PatientCrossroads, a patient-centered data company with a global platform for collecting, curating, coordinating and delivering safeguarded data from patients and clinicians, and Ommdom, Inc. and its product, CancerGene Connect, an end-to-end platform for collecting and managing genetic family histories to deliver personalized genetic risk information.

In the second quarter of 2019, we acquired Singular Bio, Inc., to assist in lowering the costs of our NIPS offering, in July 2019, we acquired Jungla Inc. to further enhance our genetic variant interpretation and the quality of results we deliver and in November 2019, we acquired Clear Genetics, Inc. to expand our ability to scale and deliver genetic information. In 2020, we acquired Orbicule BV operating under the name "Diploid" to enable us to quickly diagnose genetic disorders using artificial intelligence, as well as Genelex Solutions, LLC and YouScript Incorporated to bring pharmacogenetic testing and integrated clinical decision support to our offerings.

With respect to our acquired businesses and any acquisitions we may make in the future, we may not be able to integrate these acquisitions successfully into our existing business, and we could assume unknown or contingent liabilities. Any acquisitions by us also could result in significant write-offs or the incurrence of debt and contingent liabilities, any of which could harm our operating results. Furthermore, as we experienced in the past, the loss of customers, payers, partners or suppliers following the completion of any acquisitions by us could harm our business. Changes in services, sources of revenue, and branding or rebranding initiatives may involve substantial costs and may not be favorably received by customers, resulting in an adverse impact on our financial results, financial condition and stock price. Integration of an acquired company or business also may require management’s time and resources that otherwise would be available for ongoing development of our existing business. We may also need to divert cash from other uses in order to fund these integration activities and these new businesses. Ultimately, we may not realize the anticipated benefits of any acquisition, technology license, strategic alliance, joint venture or investment, or these benefits may take longer to realize than we expected.

To finance any acquisitions or investments, we may raise additional funds. If we raise funds by issuing equity securities, dilution to our stockholders could result. Any equity securities issued also may provide for rights, preferences or privileges senior to those of holders of our common stock. If we raise funds by issuing debt securities, these debt securities would have rights, preferences and privileges senior to those of holders of our common stock. The terms of debt securities issued or borrowings could impose significant restrictions on our operations. If we raise funds through collaborations and licensing arrangements, we might be required to relinquish significant rights to our technologies or products, or grant licenses on terms that are not favorable to us. If the price of our common stock is low or volatile, we may not be able to acquire other companies for stock. In addition, our stockholders may experience substantial dilution as a result of additional securities we may issue for acquisitions. Open market sales of substantial amounts of our common stock issued to stockholders of companies we acquire could also depress our share price. Alternatively, we may raise additional funds for our acquisition activities through public or private financings. Additional funds may not be available on terms that are favorable to us, or at all.
If third-party payers, including managed care organizations, private health insurers and government health plans do not provide adequate reimbursement for our tests or we are unable to comply with their requirements for reimbursement, our commercial success could be negatively affected.

Our ability to increase the number of billable tests and our revenue will depend on our success achieving reimbursement for our tests from third-party payers. Reimbursement by a payer may depend on a number of factors, including a payer’s determination that a test is appropriate, medically necessary, cost-effective and has received prior authorization.

Since each payer makes its own decision as to whether to establish a policy or enter into a contract to cover our tests, as well as the amount it will reimburse for a test, seeking these approvals is a time-consuming and costly process. In addition, the determination by a payer to cover and the amount it will reimburse for our tests will likely be made on an indication by indication basis. To date, we have obtained policy-level reimbursement approval or contractual reimbursement for some indications for our tests from most of the large commercial third-party payers in the United States, and the Centers for Medicare and Medicaid Services, or CMS, provides reimbursement for our multi-gene tests for hereditary breast and ovarian cancer-related disorders as well as colon cancer. We believe that establishing adequate reimbursement from Medicare is an important factor in gaining adoption from healthcare providers. Our claims for reimbursement from third-party payers may be denied upon submission, and we must appeal the claims. The appeals process is time consuming and expensive, and may not result in payment. In cases where there is not a contracted rate for reimbursement, there is typically a greater coinsurance or copayment requirement from the patient, which may result in further delay or decreased likelihood of collection.

In cases where we have established reimbursement rates with third-party payers, we face additional challenges in complying with their procedural requirements for reimbursement. These requirements often vary from payer to payer, and we have needed additional time and resources to comply with them. We have also experienced, and may continue to experience, delays in or denials of coverage if we do not adequately comply with these requirements. Our third-party payers have also requested, and in the future may request, audits of the amounts paid to us. We have been required to repay certain amounts to payers as a result of such audits, and we could be adversely affected if we are required to repay other payers for alleged overpayments due to lack of compliance with their reimbursement policies. In addition, we have experienced, and may continue to experience, delays in reimbursement when we transition to being an in-network provider with a payer.

We expect to continue to focus our resources on increasing adoption of, and expanding coverage and reimbursement for, our current tests and any future tests we may develop or acquire. If we fail to expand and maintain broad adoption of, and coverage and reimbursement for, our tests, our ability to generate revenue could be harmed and our future prospects and our business could suffer.

We face intense competition, which is likely to intensify further as existing competitors devote additional resources to, and new participants enter, the market. If we cannot compete successfully, we may be unable to increase our revenue or achieve and sustain profitability.

With the development of next generation sequencing, the clinical genetics market is becoming increasingly competitive, and we expect this competition to intensify in the future. We face competition from a variety of sources, including:

- dozens of relatively specialized competitors focused on inherited clinical genetics and gene sequencing, such as Ambry Genetics, a subsidiary of Konica Minolta Inc.; Athena Diagnostics and Blueprint Genetics, subsidiaries of Quest Diagnostics Incorporated; Baylor-Miraca Genetics Laboratories; Centogene AG; Connective Tissue Gene Test LLC, a subsidiary of Health Network Laboratories, L.P.; Cooper Surgical, Inc.; Emory Genetics Laboratory, a subsidiary of Eurofins Scientific; GeneDx, a subsidiary of OPKO Health, Inc.; Integrated Genetics, Sequenom Inc., Corielagen, and MNG Laboratories, subsidiaries of Laboratory Corporation of America Holdings; Myriad Genetics, Inc.; Natera, Inc.; Perkin Elmer, Inc.; PreventionGenetics, LLC; Progenity, Inc.; and Sema4 Genomics;
- a few large, established general testing companies with large market share and significant channel power, such as Laboratory Corporation of America Holdings and Quest Diagnostics Incorporated;
- a large number of clinical laboratories in an academic or healthcare provider setting that perform clinical genetic testing on behalf of their affiliated institutions and often sell and market more broadly; and
- a large number of new entrants into the market for genetic information ranging from informatics and analysis pipeline developers to focused, integrated providers of genetic tools and services for health and wellness including Illumina, Inc., which is also one of our suppliers.
Hospitals, academic medical centers and eventually physician practice groups and individual clinicians may also seek to perform at their own facilities the type of genetic testing we would otherwise perform for them. In this regard, continued development of equipment, reagents, and other materials as well as databases and interpretation services may enable broader direct participation in genetic testing and analysis.

Participants in closely related markets such as clinical trial or companion diagnostic testing could converge on offerings that are competitive with the type of tests we perform. Instances where potential competitors are aligned with key suppliers or are themselves suppliers could provide such potential competitors with significant advantages.

In addition, the biotechnology and genetic testing fields are intensely competitive both in terms of service and price, and continue to undergo significant consolidation, permitting larger clinical laboratory service providers to increase cost efficiencies and service levels, resulting in more intense competition.

We believe the principal competitive factors in our market are:

- breadth and depth of content;
- quality;
- reliability;
- accessibility of results;
- turnaround time of testing results;
- price and quality of tests;
- coverage and reimbursement arrangements with third-party payers;
- convenience of testing;
- brand recognition of test provider;
- additional value-added services and informatics tools;
- client service; and
- quality of website content.

Many of our competitors and potential competitors have longer operating histories, larger customer bases, greater brand recognition and market penetration, higher margins on their tests, substantially greater financial, technological and research and development resources, selling and marketing capabilities, lobbying efforts, and more experience dealing with third-party payers. As a result, they may be able to respond more quickly to changes in customer requirements, devote greater resources to the development, promotion and sale of their tests than we do, sell their tests at prices designed to win significant levels of market share, or obtain reimbursement from more third-party payers and at higher prices than we do. We may not be able to compete effectively against these organizations. Increased competition and cost-saving initiatives on the part of governmental entities and other third-party payers are likely to result in pricing pressures, which could harm our sales, profitability or ability to gain market share. In addition, competitors may be acquired by, receive investments from or enter into other commercial relationships with larger, well-established and well-financed companies as use of next generation sequencing for clinical diagnosis and preventative care increases. Certain of our competitors may be able to secure key inputs from vendors on more favorable terms, devote greater resources to marketing and promotional campaigns, adopt more aggressive pricing policies and devote substantially more resources to website and systems development than we can. In addition, companies or governments that control access to genetic testing through umbrella contracts or regional preferences could promote our competitors or prevent us from performing certain services. In addition, some of our competitors have obtained approval or clearance for certain of their tests from the U.S. Food and Drug Administration, or FDA. If payers decide to reimburse only for tests that are FDA-approved or FDA-cleared, or if they are more likely to reimburse for such tests, we may not be able to compete effectively unless we obtain similar approval or clearance for our tests. If we are unable to compete successfully against current and future competitors, we may be unable to increase market acceptance and sales of our tests, which could prevent us from increasing our revenue or achieving profitability and could cause our stock price to decline.

**We may not be able to manage our future growth effectively, which could make it difficult to execute our business strategy.**

Our expected future growth could create a strain on our organizational, administrative and operational infrastructure, including laboratory operations, quality control, customer service, marketing and sales, and
management. We may not be able to maintain the quality of or expected turnaround times for our tests, or satisfy customer demand as it grows. We will likely need to continue expanding our sales force to facilitate our growth, and we may have difficulties locating, recruiting, training and retaining sales personnel. Our ability to manage our growth effectively will require us to continue to improve our operational, financial and management controls, as well as our reporting systems and procedures. As we grow, any failure of our controls or interruption of our production facilities or systems could have a negative impact on our business and financial operations. We plan to implement new enterprise software systems in a number of areas affecting a broad range of business processes and functional areas. The time and resources required to implement these new systems is uncertain, and failure to complete these activities in a timely and efficient manner could adversely affect our operations. Future growth in our business could also make it difficult for us to maintain our corporate culture. If we are unable to manage our growth effectively, it may be difficult for us to execute our business strategy and our business could be harmed.

**Security breaches, loss of data and other disruptions could compromise sensitive information related to our business or prevent us from accessing critical information and expose us to liability, which could adversely affect our business and our reputation.**

In the ordinary course of our business, we collect and store sensitive data, including protected health information, or PHI, personally identifiable information, credit card information, intellectual property and proprietary business information owned or controlled by ourselves or our customers, payers and other parties. We manage and maintain our applications and data utilizing a combination of on-site systems, managed data center systems and cloud-based data center systems. We also communicate sensitive patient data through our various customer tools and platforms. In addition to storing and transmitting sensitive personal information that is subject to myriad legal protections, these applications and data encompass a wide variety of business-critical information including research and development information, commercial information, and business and financial information. We face a number of risks relative to protecting this critical information, including loss of access risk, inappropriate disclosure, inappropriate modification, and the risk of our being unable to adequately monitor and modify our controls over our critical information. Any technical problems that may arise in connection with our data and systems, including those that are hosted by third-party providers, could result in interruptions in our business and operations. These types of problems may be caused by a variety of factors, including infrastructure changes, human or software errors, viruses, security attacks, fraud, spikes in customer usage and denial of service issues. From time to time, large third-party web hosting providers have experienced outages or other problems that have resulted in their systems being offline and inaccessible. Such outages could materially impact our business and operations.

The secure processing, storage, maintenance and transmission of this critical information are vital to our operations and business strategy, and we devote significant resources to protecting such information. Although we take what we believe to be reasonable and appropriate measures to protect sensitive information from unauthorized access or disclosure, our information technology and infrastructure may be vulnerable to attacks by hackers or viruses or breached due to employee error, malfeasance or other disruptions. Any such breach or interruption could compromise our networks and the information stored there could be accessed by unauthorized parties, altered, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under federal or state laws that protect the privacy of personal information, such as but not limited to the Health Insurance Portability and Accountability Act of 1996, or HIPAA, the Health Information Technology for Economic and Clinical Heath Act, or HITECH, state data security and data breach notification laws, and related regulatory penalties. Although we have implemented security measures and a formal, dedicated enterprise security program to prevent unauthorized access to patient data, our various customer tools and platforms are currently accessible through our online portal and/or through our mobile applications, and there is no guarantee we can protect our online portal or our mobile applications from breach. Unauthorized access, loss or dissemination could also disrupt our operations (including our ability to conduct our analyses, provide test results, bill payers or patients, process claims and appeals, provide customer assistance, conduct research and development activities, collect, process and prepare company financial information, provide information about our tests and other patient and physician education and outreach efforts through our website, and manage the administrative aspects of our business) and damage our reputation, any of which could adversely affect our business.

In addition to security risks, we also face privacy risks. While we have policies that govern our privacy practices and procedures that aim to keep our practices consistent with such policies, such procedures are not invulnerable to human error. Should we inadvertently break the privacy promises we make to patients or consumers, we could receive a complaint from an affected individual or interested privacy regulator, such as the Federal Trade Commission, or FTC, or a state Attorney General. This risk is heightened given the sensitivity of the data we collect.
Our performance, including our research and development programs and laboratory operations, largely depend on our continuing ability to identify, hire, develop, motivate and retain highly skilled personnel for all areas of our organization, including software developers, geneticists, biostatisticians, certified laboratory scientists and other scientific and technical personnel to process and interpret our genetic tests. In addition, we may need to continue to expand our sales force with qualified and experienced personnel. Competition in our industry for qualified employees is intense, and we may not be able to attract or retain qualified personnel in the future due to the competition for qualified personnel among life science and technology businesses as well as universities and public and private research institutions, particularly in the San Francisco Bay Area. In addition, our compensation arrangements, such as our equity award programs, may not always be successful in attracting new employees and retaining and motivating our existing employees. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience constraints that could adversely affect our ability to scale our business, support our research and development efforts and our clinical laboratory. We believe that our corporate culture fosters innovation, creativity and teamwork. However, as our organization grows, we may find it difficult to maintain our corporate culture, we may not be able to maintain the quality of our services or grow effectively.

We rely on highly skilled personnel in a broad array of disciplines and, if we are unable to hire, retain or motivate these individuals, or maintain our corporate culture, we may not be able to maintain the quality of our services or grow effectively.
increasingly difficult to maintain the beneficial aspects of our corporate culture. This could negatively impact our ability to retain and attract employees and our future success.

**We need to scale our infrastructure in advance of demand for our tests, and our failure to generate sufficient demand for our tests would have a negative impact on our business and our ability to attain profitability.**

Our success depends in large part on our ability to extend our market position, to provide customers with high-quality test reports quickly and at a lower price than our competitors, and to achieve sufficient test volume to realize economies of scale. In order to execute our business model, we intend to continue to invest heavily in order to significantly scale our infrastructure, including our testing capacity and information systems, expand our commercial operations, customer service, billing and systems processes and enhance our internal quality assurance program. We expect that much of this growth will be in advance of demand for our tests. Our current and future expense levels are to a large extent fixed and are largely based on our investment plans and our estimates of future revenue. Because the timing and amount of revenue from our tests is difficult to forecast, when revenue does not meet our expectations, we may not be able to adjust our spending promptly or reduce our spending to levels commensurate with our revenue. Even if we are able to successfully scale our infrastructure and operations, we cannot assure you that demand for our tests will increase at levels consistent with the growth of our infrastructure. If we fail to generate demand commensurate with this growth or if we fail to scale our infrastructure sufficiently in advance of demand to successfully meet such demand, our business, prospects, financial condition and results of operations could be adversely affected.

**If we are not able to continue to generate substantial demand of our tests, our commercial success will be negatively affected.**

Our business model assumes that we will be able to generate significant test volume, and we may not succeed in continuing to drive adoption of our tests to achieve sufficient volumes. Inasmuch as detailed genetic data from broad-based testing panels such as our tests have only recently become available at relatively affordable prices, the continued pace and degree of clinical acceptance of the utility of such testing is uncertain. Specifically, it is uncertain how much genetic data will be accepted as necessary or useful, as well as how detailed that data should be, particularly since medical practitioners may have become accustomed to genetic testing that is specific to one or a few genes. Given the substantial amount of additional information available from a broad-based testing panel such as ours, there may be distrust as to the reliability of such information when compared with more limited and focused genetic tests. To generate further demand for our tests, we will need to continue to make clinicians aware of the benefits of our tests, including the price, the breadth of our testing options, and the benefits of having additional genetic data available from which to make treatment decisions. Because broad-based testing panels are relatively new, it may be more difficult or take more time for us to expand clinical adoption beyond our current customer base. In addition, clinicians in other areas of medicine may not adopt genetic testing for hereditary disease as readily as it has been adopted in hereditary cancer and our efforts to sell our tests to clinicians outside of oncology may not be successful. A lack of or delay in clinical acceptance of broad-based panels such as ours may also not impact sales and market acceptance of our tests and limit our revenue growth and potential profitability. Genetic testing is expensive and many potential customers may be sensitive to pricing. In addition, potential customers may not adopt our tests if adequate reimbursement is not available, or if we are not able to maintain low prices relative to our competitors. Also, we have recently introduced our direct channel, in which we facilitate the ordering of our genetic tests by consumers through an online network of physicians. Since we have limited experience directly marketing to patients, we may not be successful in increasing demand for our tests through this new channel. Patient-initiated testing may also be perceived negatively by our existing customer base of clinicians and genetic counselors, in which case our core business could be harmed.

If we are not able to generate demand for our tests at sufficient volume, or if it takes significantly more time to generate this demand than we anticipate, our business, prospects, financial condition and results of operations could be materially harmed.

**Our success will depend on our ability to use rapidly changing genetic data to interpret test results accurately and consistently, and our failure to do so would have an adverse effect on our operating results and business, harm our reputation and could result in substantial liabilities that exceed our resources.**

Our success depends on our ability to provide reliable, high-quality tests that incorporate rapidly evolving information about the role of genes and gene variants in disease and clinically relevant outcomes associated with those variants. Errors, such as failure to detect genomic variants with high accuracy, or mistakes, such as failure to identify, or incompletely or incorrectly identifying, gene variants or their significance, could have a significant adverse impact on our business.
Hundreds of genes can be implicated in some disorders, and overlapping networks of genes and symptoms can be implicated in multiple conditions. As a result, a substantial amount of judgment is required in order to interpret testing results for an individual patient and to develop an appropriate patient report. We classify variants in accordance with published guidelines as benign, likely benign, variants of uncertain significance, likely pathogenic or pathogenic, and these guidelines are subject to change. In addition, it is our practice to offer support to clinicians and geneticists ordering our tests regarding which genes or panels to order as well as interpretation of genetic variants. We also rely on clinicians to interpret what we report and to incorporate specific information about an individual patient into the physician’s treatment decision.

The marketing, sale and use of our genetic tests could subject us to liability for errors in, misunderstandings of, or inappropriate reliance on, information we provide to clinicians, geneticists or patients, and lead to claims against us if someone were to allege that a test failed to perform as it was designed, if we failed to correctly interpret the test results, if we failed to update the test results due to a reclassification of the variants according to new published guidelines, or if the ordering physician were to misinterpret test results or improperly rely on them when making a clinical decision. In addition, our entry into the reproductive health testing market exposes us to increased liability. A product liability or professional liability claim could result in substantial damages and be costly and time-consuming for us to defend. Although we maintain liability insurance, including for errors and omissions, we cannot assure you that such insurance would fully protect us from the financial impact of defending against these types of claims or any judgments, fines or settlement costs arising out of any such claims. Any liability claim, including an errors and omissions liability claim, brought against us, with or without merit, could increase our insurance rates or prevent us from securing insurance coverage in the future. Additionally, any liability lawsuit could cause injury to our reputation or cause us to suspend sales of our tests. The occurrence of any of these events could have an adverse effect on our reputation and results of operations.

Our industry is subject to rapidly changing technology and new and increasing amounts of scientific data related to genes and genetic variants and their role in disease. Our failure to develop tests to keep pace with these changes could make us obsolete.

In recent years, there have been numerous advances in methods used to analyze very large amounts of genomic information and the role of genetics and gene variants in disease and treatment therapies. Our industry has and will continue to be characterized by rapid technological change, increasingly larger amounts of data, frequent new testing service introductions and evolving industry standards, all of which could make our tests obsolete. Our future success will also depend on our ability to keep pace with the evolving needs of our customers on a timely and cost-effective basis and to pursue new market opportunities that develop as a result of technological and scientific advances. Our tests could become obsolete and our business adversely affected unless we continually update our offerings to reflect new scientific knowledge about genes and genetic variations and their role in diseases and treatment therapies.

Our success will depend in part on our ability to generate sales using our internal sales team and through alternative marketing strategies.

We may not be able to market or sell our current tests and any future tests we may develop or acquire effectively enough to drive demand sufficient to support our planned growth. We currently sell our tests primarily through our internal sales force. Historically, our sales efforts have been focused primarily on hereditary cancer and more recently on reproductive health. Our efforts to sell our tests to clinicians and patients outside of oncology may not be successful, or may be difficult to do successfully without significant additional selling and marketing efforts and expense. In the past, we have increased our sales force each year in order to drive our growth. In addition to the efforts of our sales force, future sales will depend in large part on our ability to develop and substantially expand awareness of our company and our tests through alternative strategies including through education of key opinion leaders, through social media-related and online outreach, education and marketing efforts, and through focused channel partner strategies designed to drive demand for our tests. We also plan to continue to spend on consumer advertising in connection with our direct channel to consumers, which could be costly. We have limited experience implementing these types of marketing efforts. We may not be able to drive sufficient levels of revenue using these sales and marketing methods and strategies necessary to support our planned growth, and our failure to do so could limit our revenue and potential profitability.

Outside the United States we are increasing our direct sales personnel; however, we have limited experience selling and operating internationally. We also use a limited number of distributors to assist internationally with sales, logistics, education and customer support. Sales practices utilized by our distributors that are locally acceptable may not comply with sales practices standards required under U.S. laws that apply to us, which could create additional compliance risk. If our sales and marketing efforts are not successful outside the United States,
we may not achieve significant market acceptance for our tests outside the United States, which could adversely impact our business.

**Impairment in the value of our goodwill or other intangible assets could have a material adverse effect on our operating results and financial condition.**

We record goodwill and intangible assets at fair value upon the acquisition of a business. Goodwill represents the excess of amounts paid for acquiring businesses over the fair value of the net assets acquired. Goodwill and indefinite-lived intangible assets are evaluated for impairment annually, or more frequently if conditions warrant, by comparing the carrying value of a reporting unit to its estimated fair value. Intangible assets with definite lives are reviewed for impairment when events or circumstances indicate that their carrying value may not be recoverable. Declines in operating results, divestitures, sustained market declines and other factors that impact the fair value of a reporting unit could result in an impairment of goodwill or intangible assets and, in turn, a charge to net income. Any such charges could have a material adverse effect on our results of operations or financial condition.

**We rely on a limited number of suppliers or, in some cases, sole suppliers, for some of our laboratory instruments, materials and services, and we may not be able to find replacements or immediately transition to alternative suppliers.**

We rely on a limited number of suppliers, or, in some cases, sole suppliers, including Illumina, Inc., Integrated DNA Technologies Incorporated, Qiagen N.V., Roche Holdings Ltd. and Twist Bioscience Corporation for certain laboratory substances used in the chemical reactions incorporated into our processes, which we refer to as reagents, as well as sequencers and other equipment and materials which we use in our laboratory operations. We do not have short- or long-term agreements with most of our suppliers, and our suppliers could cease supplying these materials and equipment at any time, or fail to provide us with sufficient quantities of materials or materials that meet our specifications. Our laboratory operations could be interrupted if we encounter delays or difficulties in securing these reagents, sequencers or other equipment or materials, and if we cannot obtain an acceptable substitute. Any such interruption could significantly affect our business, financial condition, results of operations and reputation. We rely on Illumina as the sole supplier of next generation sequencers and associated reagents and as the sole provider of maintenance and repair services for these sequencers. Any disruption in Illumina’s operations could impact our supply chain and laboratory operations as well as our ability to conduct our tests, and it could take a substantial amount of time to integrate replacement equipment into our laboratory operations.

We believe that there are only a few other manufacturers that are currently capable of supplying and servicing the equipment necessary for our laboratory operations, including sequencers and various associated reagents. The use of equipment or materials provided by these replacement suppliers would require us to alter our laboratory operations. Transitioning to a new supplier would be time consuming and expensive, may result in interruptions in our laboratory operations, could affect the performance specifications of our laboratory operations or could require that we revalidate our tests. We cannot assure you that we will be able to secure alternative equipment, reagents and other materials, and bring such equipment, reagents and materials on line and revalidate them without experiencing interruptions in our workflow. In the case of an alternative supplier for Illumina, we cannot assure you that replacement sequencers and associated reagents will be available or will meet our quality control and performance requirements for our laboratory operations. If we encounter delays or difficulties in securing, reconfiguring or revalidating the equipment and reagents we require for our tests, our business, financial condition, results of operations and reputation could be adversely affected.

**If our laboratories in California or Washington become inoperable due to disasters, health epidemics or for any other reasons, we will be unable to perform our tests and our business will be harmed.**

We perform all of our tests at our production facilities in San Francisco and Irvine, California, and in Seattle, Washington. Our laboratories and the equipment we use to perform our tests would be costly to replace and could require substantial lead time to replace and qualify for use. Our laboratories may be harmed or rendered inoperable by natural or man-made disasters, including earthquakes, flooding, fire and power outages, or by health epidemics, such as the COVID-19 pandemic, which may render it difficult or impossible for us to perform our tests for some period of time. This risk of natural disaster is especially high for us since we perform the substantial majority of our tests at our San Francisco laboratory, which is located in an active seismic region, and we do not have a redundant facility to perform the same tests in the event our San Francisco laboratory is inoperable. The inability to perform our tests or the backlog that could develop if our laboratories are inoperable for even a short period of time may result in the loss of customers or harm our reputation. Although we maintain insurance for damage to our property and the disruption of our business, this insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, if at all.
The loss of any member or change in structure of our senior management team could adversely affect our business.

Our success depends in large part upon the skills, experience and performance of members of our executive management team and others in key leadership positions. The efforts of these persons will be critical to us as we continue to develop our technologies and test processes and focus on scaling our business. If we were to lose one or more key executives, we may experience difficulties in competing effectively, developing our technologies and implementing our business strategy. All of our executives and employees are at-will, which means that either we or the executive or employee may terminate their employment at any time. We do not carry key man insurance for any of our executives or employees. In addition, we do not have a long-term retention agreement in place with our president and chief executive officer.

Development of new tests is a complex process, and we may be unable to commercialize new tests on a timely basis, or at all.

We cannot assure you that we will be able to develop and commercialize new tests on a timely basis. Before we can commercialize any new tests, we will need to expend significant funds in order to:

- conduct research and development;
- further develop and scale our laboratory processes; and
- further develop and scale our infrastructure to be able to analyze increasingly larger and more diverse amounts of data.

Our testing service development process involves risk, and development efforts may fail for many reasons, including:

- failure of any test to perform as expected;
- lack of validation or reference data; or
- failure to demonstrate utility of a test.

As we develop tests, we will have to make significant investments in development, marketing and selling resources. In addition, competitors may develop and commercialize competing tests faster than we are able to do so.

We depend on our information technology systems, and any failure of these systems could harm our business.

We depend on information technology and telecommunications systems for significant elements of our operations, including our laboratory information management system, our bioinformatics analytical software systems, our database of information relating to genetic variations and their role in disease process and drug metabolism, our clinical report optimization systems, our customer-facing web-based software, our customer reporting, and our various customer tools and platforms. We have installed, and expect to expand, a number of enterprise software systems that affect a broad range of business processes and functional areas, including for example, systems handling human resources, financial controls and reporting, customer relationship management, regulatory compliance and other infrastructure operations. In addition, we intend to extend the capabilities of both our preventative and detective security controls by augmenting the monitoring and alerting functions, the network design, and the automatic countermeasure operations of our technical systems. These information technology and telecommunications systems support a variety of functions, including laboratory operations, test validation, sample tracking, quality control, customer service support, billing and reimbursement, research and development activities, scientific and medical curation, and general administrative activities, including financial reporting.

Information technology and telecommunications systems are vulnerable to damage from a variety of sources, including telecommunications or network failures, malicious human acts and natural disasters. Moreover, despite network security and back-up measures, some of our servers are potentially vulnerable to physical or electronic break-ins, computer viruses and similar disruptive problems. Despite the precautionary measures we have taken to prevent unanticipated problems that could affect our information technology and telecommunications systems, failures or significant downtime of our information technology or telecommunications systems or those used by our third-party service providers could prevent us from conducting tests, preparing and providing reports to clinicians, billing payers, processing reimbursement appeals, handling physician or patient inquiries, conducting research and development activities, and managing the administrative and financial aspects of our business. Any disruption or loss of information technology or telecommunications systems on which critical aspects of our operations depend could have an adverse effect on our business and results of operations.
Technical problems have arisen, and may arise in the future, in connection with our data and systems, including those that are hosted by third-party providers, which have in the past and may in the future result in interruptions in our business and operations. These types of problems may be caused by a variety of factors, including infrastructure changes, human or software errors, viruses, security attacks, fraud, spikes in customer usage and denial of service issues. From time to time, large third-party web hosting providers have experienced outages or other problems that have resulted in their systems being offline and inaccessible. Such outages could materially impact our business and operations.

**Ethical, legal and social concerns related to the use of genetic information could reduce demand for our tests.**

Genetic testing has raised ethical, legal and social issues regarding privacy and the appropriate uses of the resulting information. Governmental authorities could, for social or other purposes, limit or regulate the use of genetic information or genetic testing or prohibit testing for genetic predisposition to certain conditions, particularly for those that have no known cure. Similarly, these concerns may lead patients to refuse to use, or clinicians to be reluctant to order, genomic tests even if permissible. These and other ethical, legal and social concerns may limit market acceptance of our tests or reduce the potential markets for our tests, either of which could have an adverse effect on our business, financial condition or results of operations.

**Our international business exposes us to business, regulatory, political, operational, financial and economic risks associated with doing business outside of the United States.**

Doing business internationally involves a number of risks, including:

- multiple, conflicting and changing laws and regulations such as privacy regulations, tax laws, export and import restrictions, employment laws, regulatory requirements, and other governmental approvals, permits and licenses;
- failure by us or our distributors to obtain regulatory approvals for the use of our tests in various countries;
- complexities and difficulties in obtaining protection and enforcing our intellectual property;
- difficulties in staffing and managing foreign operations;
- complexities associated with managing multiple payer reimbursement regimes, government payers or patient self-pay systems;
- logistics and regulations associated with shipping samples, including infrastructure conditions, customs and transportation delays;
- limits on our ability to penetrate international markets if we do not to conduct our tests locally;
- natural disasters, including the recent and ongoing outbreak and spreading of Coronavirus, political and economic instability, including wars, terrorism and political unrest, outbreak of disease, boycotts, curtailment of trade and other business restrictions; and
- regulatory and compliance risks that relate to maintaining accurate information and control over activities that may fall within the purview of the U.S. Foreign Corrupt Practices Act, or FCPA, its books and records provisions, or its anti-bribery provisions.

Any of these factors could significantly harm our international operations and, consequently, our revenue and results of operations.

In addition, applicable export or import laws and regulations such as prohibitions on the export of samples imposed by countries outside of the United States, or international privacy or data restrictions that are different or more stringent than those of the United States, may require that we build additional laboratories or engage in joint ventures or other business partnerships in order to offer our tests internationally in the future. Any such restrictions would impair our ability to offer our tests in such countries and could have an adverse effect on our business, financial condition and results of operations.

**Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.**

At June 30, 2020, our total gross deferred tax assets were $204.5 million. Due to our lack of earnings history and uncertainties surrounding our ability to generate future taxable income, the net deferred tax assets have been fully offset by a valuation allowance. The deferred tax assets were primarily comprised of federal and state tax net operating losses and tax credit carryforwards. Furthermore, under Section 382 of the Internal Revenue Code of 1986, as amended, or the Internal Revenue Code, if a corporation undergoes an “ownership change,” the
corporation’s ability to use its pre-change net operating loss carryforwards, or NOLs, and other pre-change tax attributes (such as research tax credits) to offset its future taxable income may be limited. In general, an “ownership change” occurs if there is a cumulative change in our ownership by “5% shareholders” that exceeds 50 percentage points over a rolling three-year period. Our existing NOLs and tax credit carryovers may be subject to limitations arising from previous ownership changes, and if we undergo one or more ownership changes in connection with completed acquisitions, or other future transactions in our stock, our ability to utilize NOLs and tax credit carryovers could be further limited by Section 382 of the Internal Revenue Code. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss and tax credit carryforwards to offset U.S. federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us. The annual limitation may result in the expiration of certain net operating loss and tax credit carryforwards before their utilization. In addition, the Tax Cuts and Jobs Act limits the deduction for NOLs to 80% of current year taxable income and eliminates NOL carrybacks. Also, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed.

Risks related to government regulation

If the FDA regulates our tests as medical devices, we could incur substantial costs and our business, financial condition and results of operations could be adversely affected.

We provide our tests as laboratory-developed tests, or LDTs. CMS and certain state agencies regulate the performance of LDTs (as authorized by the Clinical Laboratory Improvement Amendments of 1988, or CLIA, and state law, respectively).

Historically, the FDA has exercised enforcement discretion with respect to most LDTs and has not required laboratories that furnish LDTs to comply with the agency’s requirements for medical devices (e.g., establishment registration, device listing, quality systems regulations, premarket clearance or premarket approval, and post-market controls). In recent years, however, the FDA has stated it intends to end its policy of general enforcement discretion and regulate certain LDTs as medical devices. To this end, on October 3, 2014, the FDA issued two draft guidance documents, entitled “Framework for Regulatory Oversight of Laboratory Developed Tests (LDTs)” and “FDA Notification and Medical Device Reporting for Laboratory Developed Tests (LDTs),” respectively, that set forth a proposed risk-based regulatory framework that would apply varying levels of FDA oversight to LDTs. Subsequently, on January 13, 2017, the FDA published a “discussion paper” in which it outlined a substantially revised “possible approach” to the oversight of LDTs. In December 2018, a draft bill titled the “Verifying Accurate Leading-edge IVCT Development Act of 2018,” or VALID Act, was released for discussion. The draft bill proposes a risk-based approach to regulate LDTs and creates a new in vitro clinical test, or IVCT, category of regulated products, which includes LDTs, and a regulatory structure under the FDA. As proposed, the draft bill grandfathered many existing tests from the proposed premarket approval, quality systems, and labeling requirements, respectively, but would require such tests to comply with other regulatory requirements (e.g., registration and notification, adverse event reporting). We cannot predict if this draft bill will be enacted in its current (or any other) form and cannot quantify the effect of this draft bill on our business.

In April 2020, we completed our acquisition of Genelex Solutions, LLC, which offers certain pharmacogenetic, or PGx, tests as LDTs. Recently the FDA has taken a more active role in the oversight of PGx tests offered as LDTs. In 2019, the FDA contacted several clinical laboratories, including Genelex, to demand changes to PGx test reports and marketing materials. In February 2020, the FDA issued a statement indicating that it continues to have concerns about the claims that certain clinical laboratories make with respect to their PGx tests, and published tables that list PGx associations for which FDA has determined that the data support therapeutic management recommendations, a potential impact on safety or response, or a potential impact on pharmacokinetic properties only, respectively. To date, however, the FDA has not provided any general guidance on the type(s) of claims or other characteristics that will cause a PGx test to fall outside FDA’s enforcement discretion. As such, the extent to which FDA will allow any laboratory, including Genelex or Invitae, to offer PGx tests in their current form without meeting FDA regulatory requirements for medical devices is unclear at this time.

In March 2020, a bill titled the “Verifying Accurate Leading-edge IVCT Development Act of 2020,” or VALID Act, was officially introduced in Congress. The bill proposes a risk-based approach to regulate LDTs and creates a new in vitro clinical test, or IVCT, category of regulated products, which includes LDTs, and a regulatory structure under the FDA. As proposed, the bill grandfathered many existing tests from the proposed premarket approval, quality systems, and labeling requirements, respectively, but would require such tests to comply with other regulatory requirements (e.g., registration and listing, adverse event reporting). Later that month, Senator Paul introduced the Verified Innovative Testing in American Laboratories Act of 2020, or VITAL Act, which proposes that all aspects of “laboratory-developed testing procedures” be subject to regulation under CLIA, and that no aspects of
such procedures be subject to regulation by the FDA. We cannot predict if either of these bills will be enacted in their current (or any other) form and cannot quantify the effect of these bills on our business.

Legislative proposals addressing the FDA’s oversight of LDTs have been introduced in previous Congresses, and we expect that new legislative proposals may be introduced from time-to-time. The likelihood that Congress will pass such legislation and the extent to which such legislation may affect the FDA’s plans to regulate certain LDTs as medical devices is difficult to predict at this time.

If the FDA ultimately regulates certain LDTs (either as medical devices or as part of a new stand-alone regulatory category for IVCTs), whether via individualized enforcement action, or more generally, as outlined in final guidance or final regulation, or as instructed by Congress, our tests may be subject to certain additional regulatory requirements. Complying with the FDA’s requirements can be expensive, time-consuming and subject us to significant or unanticipated delays. Insofar as we may be required to obtain premarket clearance or approval to perform or continue performing an LDT, we cannot assure you that we will be able to obtain such authorization. Even if we obtain regulatory clearance or approval where required, such authorization may not be for the intended uses that we believe are commercially attractive or are critical to the commercial success of our tests. As a result, the application of the FDA’s requirements to our tests could materially and adversely affect our business, financial condition and results of operations.

Failure to comply with applicable FDA regulatory requirements may trigger a range of enforcement actions by the FDA including warning letters, civil monetary penalties, injunctions, criminal prosecution, recall or seizure, operating restrictions, partial suspension or total shutdown of operations, and denial of or challenges to applications for clearance or approval, as well as significant adverse publicity.

In addition, in November 2013, the FDA issued final guidance regarding the distribution of products labeled for research use only. Certain of the reagents and other products we use in our tests are labeled as research use only products. Certain of our suppliers may cease selling research use only products to us and any failure to obtain an acceptable substitute could significantly and adversely affect our business, financial condition and results of operations.

If we fail to comply with federal, state and foreign laboratory licensing requirements, we could lose the ability to perform our tests or experience disruptions to our business.

We are subject to CLIA, a federal law that regulates clinical laboratories that perform testing on specimens derived from humans for the purpose of providing information for the diagnosis, prevention or treatment of disease. CLIA regulations establish specific standards with respect to personnel qualifications, facility administration, proficiency testing, quality control, quality assurance and inspections. CLIA certification is also required in order for us to be eligible to bill state and federal healthcare programs, as well as many private third-party payers, for our tests. We have current CLIA certifications to conduct our tests at our laboratories in San Francisco and Irvine, California and in Seattle, Washington. To renew these certifications, we are subject to survey and inspection every two years. Moreover, CLIA inspectors may make random inspections of our clinical reference laboratories.

We are also required to maintain licenses to conduct testing in California and Washington. California and Washington laws establish standards for day-to-day operation of our clinical reference laboratories in San Francisco and Irvine, and in Seattle, respectively, which include the training and skills required of personnel and quality control. We also maintain out-of-state laboratory licenses to conduct testing on specimens from Maryland, New York, Pennsylvania and Rhode Island, and with respect to our laboratory in Washington, on specimens from California.

In addition to having laboratory licenses in New York, our clinical reference laboratories are approved on test-specific bases by the New York State Department of Health, or NYDOH. Other states may adopt similar licensure requirements in the future, which may require us to modify, delay or stop our operations in such jurisdictions. We may also be subject to regulation in foreign jurisdictions as we seek to expand international utilization of our tests or such jurisdictions adopt new licensure requirements, which may require review of our tests in order to offer them or may have other limitations such as restrictions on the transport of samples necessary for us to perform our tests that may limit our ability to make our tests available outside of the United States. Complying with licensure requirements in new jurisdictions may be expensive, time-consuming, and subject us to significant and unanticipated delays.

Failure to comply with applicable clinical laboratory licensure requirements may result in a range of enforcement actions, including license suspension, limitation, or revocation, directed plan of action, onsite monitoring, civil monetary penalties, criminal sanctions, and cancellation of the laboratory’s approval to receive Medicare and Medicaid payment for its services, as well as significant adverse publicity. Any sanction imposed
under CLIA, its implementing regulations, or state or foreign laws or regulations governing clinical laboratory licensure, or our failure to renew our CLIA certificate, a state or foreign license, or accreditation, could have a material adverse effect on our business, financial condition and results of operations. Even if we were able to bring our laboratory back into compliance, we could incur significant expenses and potentially lose revenue in doing so.

The College of American Pathologists, or CAP, maintains a clinical laboratory accreditation program. CAP asserts that its program is "designed to go well beyond regulatory compliance" and helps laboratories achieve the highest standards of excellence to positively impact patient care. While not required to operate a CLIA-certified laboratory, many private insurers require CAP accreditation as a condition to contracting with clinical laboratories to cover their tests. In addition, some countries outside the United States require CAP accreditation as a condition to permitting clinical laboratories to test samples taken from their citizens. We have CAP accreditations for our laboratories. Failure to maintain CAP accreditation could have a material adverse effect on the sales of our tests and the results of our operations.

Complying with numerous statutes and regulations pertaining to our business is an expensive and time-consuming process, and any failure to comply could result in substantial penalties.

Our operations are subject to other extensive federal, state, local and foreign laws and regulations, all of which are subject to change. These laws and regulations currently include, among others:

- HIPAA, which establishes comprehensive federal standards with respect to the privacy and security of protected health information and requirements for the use of certain standardized electronic transactions;
- amendments to HIPAA under HITECH, which strengthen and expand HIPAA privacy and security compliance requirements, increase penalties for violators and expand vicarious liability, extend enforcement authority to state attorneys general, and impose requirements for breach notification;
- the federal Anti-Kickback Statute, which prohibits knowingly and willfully offering, paying, soliciting or receiving remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or in return for the referral of an individual, for the furnishing of or arrangement for the furnishing of any item or service for which payment may be made in whole or in part by a federal healthcare program, or the purchasing, leasing, ordering, arranging for, or recommend purchasing, leasing or ordering, any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program;
- EKRA, which prohibits payments for referrals to recovery homes, clinical treatment facilities, and laboratories and reaches beyond federal health care programs, to include private insurance;
- the federal physician self-referral law, known as the Stark Law, which prohibits a physician from making a referral to an entity for certain designated health services covered by the Medicare program, including laboratory and pathology services, if the physician or an immediate family member has a financial relationship with the entity unless an exception applies, and prohibits an entity from billing for designated health services furnished pursuant to a prohibited referral;
- the federal false claims law, which imposes liability on any person or entity that, among other things, knowingly presents, or causes to be presented, a false or fraudulent claim for payment to the federal government;
- the federal Civil Monetary Penalties Law, which prohibits, among other things, the offering or transfer of remuneration to a Medicare or state healthcare program beneficiary if the person knows or should know it is likely to influence the beneficiary’s selection of a particular provider, practitioner or supplier of services reimbursable by Medicare or a state healthcare program, unless an exception applies;
- the HIPAA fraud and abuse provisions, which create new federal criminal statutes that prohibit, among other things, defrauding health care benefit programs, willfully obstructing a criminal investigation of a healthcare offense and falsifying or concealing a material fact or making any materially false statements in connection with the payment for healthcare benefits, items or services;
- other federal and state fraud and abuse laws, such as anti-kickback laws, prohibitions on self-referral, fee-splitting restrictions, insurance fraud laws, anti-markup laws, prohibitions on the provision of tests at no or discounted cost to induce physician or patient adoption, and false claims acts, which may extend to services reimbursable by any third-party payer, including private insurers;
- the prohibition on reassignment of Medicare claims, which, subject to certain exceptions, precludes the reassignment of Medicare claims to any other party;
• state laws that prohibit other specified practices, such as billing clinicians for testing that they order; waiving coinsurance, copayments, deductibles and other amounts owed by patients; billing a state Medicaid program at a price that is higher than what is charged to one or more other payers; and
• similar foreign laws and regulations that apply to us in the countries in which we operate or may operate in the future.

We have adopted policies and procedures designed to comply with these laws and regulations. In the ordinary course of our business, we conduct internal reviews of our compliance with these laws. Our compliance may also be subject to governmental review. The growth of our business and our expansion outside of the United States may increase the potential of violating these laws or our internal policies and procedures. The risk of our being found in violation of these or other laws and regulations is further increased by the fact that many have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. Any action brought against us for violation of these or other laws or regulations, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management’s attention from the operation of our business. If our operations are found to be in violation of any of these laws and regulations, we may be subject to any applicable penalty associated with the violation, including administrative, civil and criminal penalties, damages, fines, individual imprisonment, exclusion from participation in Federal healthcare programs, refunding of payments received by us, and curtailment or cessation of our operations. Any of the foregoing consequences could seriously harm our business and our financial results.

Healthcare policy changes, including legislation reforming the U.S. healthcare system, may have a material adverse effect on our financial condition, results of operations and cash flows.

In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively referred to as the Affordable Care Act, was enacted in the United States, which made a number of substantial changes in the way healthcare is financed by both governmental and private insurers. Policy changes or implementation of new health care legislation could result in significant changes to health care systems. In the United States, this could include potential modification or repeal of all or parts of the Affordable Care Act.

In April 2014, Congress passed the Protecting Access to Medicare Act of 2014, or PAMA, which included substantial changes to the way in which clinical laboratory services are paid under Medicare. Under PAMA (as amended by the Further Consolidated Appropriations Act, 2020 and the Coronavirus Aid, Relief, and Economic Security Act, respectively) and its implementing regulations, clinical laboratories must report to CMS private payer rates beginning in 2017, and then in 2022 and every three years thereafter for clinical diagnostic laboratory tests that are not advanced diagnostic laboratory tests and every year for advanced diagnostic laboratory tests.

We do not believe that our tests meet the definition of advanced diagnostic laboratory tests, but in the event that we seek designation for one or more of our tests as an advanced diagnostic laboratory test and the tests are determined by CMS to meet these criteria or new criteria developed by CMS, we would be required to report private payer data for those tests annually. Otherwise, we will be required to report private payer rates for our tests on an every three years basis starting in 2022. Laboratories that fail to timely report the required payment information may be subject to substantial civil money penalties.

As set forth in the PAMA final rule, for tests furnished on or after January 1, 2018, Medicare payments for clinical diagnostic laboratory tests are paid based upon these reported private payer rates. For clinical diagnostic laboratory tests that are assigned a new or substantially revised code, initial payment rates for clinical diagnostic laboratory tests that are not advanced diagnostic laboratory tests will be assigned by the cross-walk or gap-fill methodology. Initial payment rates for new advanced diagnostic laboratory tests will be based on the actual list charge for the laboratory test. The payment rates calculated under PAMA went into effect starting January 1, 2018. Where applicable, reductions to payment rates resulting from the new methodology are limited to 10% per test per year in each of the years 2018 through 2020. Rates will be held at 2020 levels during 2021, and then, where applicable based upon median private payer rates reported in 2017 or 2022, reduced by up to 15% per test per year in each of 2022 through 2024 (with a second round of private payer rate reporting in 2022 to establish rates for 2023 through 2025).

PAMA also authorized the adoption of new, temporary billing codes and/or unique test identifiers for FDA-cleared or approved tests as well as advanced diagnostic laboratory tests. The CPT® Editorial Panel approved a proposal to create a new section of billing codes to facilitate implementation of this section of PAMA, but these codes would apply to our tests only if we apply for such codes.
In March 2018, CMS published a national coverage determination, or NCD, for next generation sequencing, or NGS tests for somatic (acquired) cancer testing. CMS subsequently updated this NCD in January 2020 to address coverage for NGS tests for germline (inherited) cancer testing and to clarify certain aspects of Medicare’s coverage of NGS for somatic cancer testing. For somatic cancer testing, the updated NCD establishes full coverage for FDA-approved or FDA-cleared NGS-based companion diagnostic assays that report results using report templates that specify treatment options when ordered by the patient’s treating physician for patients with ovarian or breast cancer, a clinical indication for germline testing for hereditary breast or ovarian cancer, and a risk factor for germline breast or ovarian cancer, provided the patient has not previously been tested with the same germline test using NGS for the same germline genetic content. The NCD also gives MACs the authority to establish local coverage for NGS-based germline tests for ovarian or breast cancer that are not FDA-approved or FDA-cleared, as well as for NGS-based tests for any other cancer diagnosis (regardless of the test’s FDA regulatory status) when ordered by the patient’s treating physician for patients meeting the above-referenced criteria. It appears that NGS-based somatic cancer tests provided for patients with cancer that do not meet the above-referenced criteria - e.g., patients with earlier stage cancers - are nationally non-covered under the NCD.

Effective January 27, 2020, the NCD also established full coverage for FDA-approved or FDA-cleared NGS-based germline tests that report results using report templates that specify treatment options when ordered by the patient’s treating physician for patients with ovarian or breast cancer, a clinical indication for germline testing for hereditary breast or ovarian cancer, and a risk factor for germline breast or ovarian cancer, provided the patient has not previously been tested with the same germline test using NGS for the same germline genetic content. The NCD also gives MACs the authority to establish local coverage for NGS-based germline tests for ovarian or breast cancer that are not FDA-approved or FDA-cleared, as well as for NGS-based tests for any other cancer diagnosis (regardless of the test’s FDA regulatory status) when ordered by the patient’s treating physician for patients meeting the above-referenced criteria for germline testing. Since we already have local coverage for our germline tests for ovarian and breast cancer, we believe that the NCD will not have a material impact on which of our tests will be reimbursable by CMS for Medicare patients.

We cannot predict whether future healthcare initiatives will be implemented at the federal or state level, or how any future legislation or regulation may affect us. For instance, the payment reductions imposed by the Affordable Care Act and the expansion of the federal and state governments’ role in the U.S. healthcare industry as well as changes to the reimbursement amounts paid by payers for our tests and future tests or our medical procedure volumes may reduce our profits and have a materially adverse effect on our business, financial condition, results of operations and cash flows. Notably, Congress enacted legislation in 2017 that eliminated the Affordable Care Act’s “individual mandate” beginning in 2019, which may significantly impact the number of covered lives participating in exchange plans. Moreover, Congress has proposed on several occasions to impose a 20% coinsurance on patients for clinical laboratory tests reimbursed under the clinical laboratory fee schedule, which would increase our billing and collecting costs and decrease our revenue.

If we use hazardous materials in a manner that causes injury, we could be liable for resulting damages.

Our activities currently require the use of hazardous chemicals and biological material. We cannot eliminate the risk of accidental contamination or injury to employees or third parties from the use, storage, handling or disposal of these materials. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our resources or any applicable insurance coverage we may have. In 2018, we decommissioned our laboratory in Cambridge, Massachusetts; however, we could be held liable for any damages resulting from our prior use of hazardous chemicals and biological materials at this facility. Additionally, we are subject on an ongoing basis to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. The cost of compliance with these laws and regulations may become significant, and our failure to comply may result in substantial fines or other consequences, and either could negatively affect our operating results.

We could be adversely affected by violations of the FCPA and other worldwide anti-bribery laws.

We are subject to the FCPA, which prohibits companies and their intermediaries from making payments in violation of law to non-U.S. government officials for the purpose of obtaining or retaining business or securing any other improper advantage. We are increasing our direct sales and operations personnel outside the United States, in which we have limited experience. We use a limited number of independent distributors to sell our tests internationally, which requires a high degree of vigilance in maintaining our policy against participation in corrupt activity, because these distributors could be deemed to be our agents, and we could be held responsible for their actions. Other U.S. companies in the medical device and pharmaceutical fields have faced criminal penalties under the FCPA for allowing their agents to deviate from appropriate practices in doing business with these individuals. We are also subject to similar anti-bribery laws in the jurisdictions in which we operate, including the United Kingdom’s Bribery Act of 2010, which also prohibits commercial bribery and makes it a crime for companies to fail

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to prevent bribery. These laws are complex and far-reaching in nature, and, as a result, we cannot assure you that we would not be required in the future to alter one or more of our practices to be in compliance with these laws or any changes in these laws or the interpretation thereof. Any violations of these laws, or allegations of such violations, could disrupt our operations, involve significant management distraction, involve significant costs and expenses, including legal fees, and could result in a material adverse effect on our business, prospects, financial condition or results of operations. We could also incur severe penalties, including criminal and civil penalties, disgorgement and other remedial measures.

**Risks related to our intellectual property**

*Litigation or other proceedings or third-party claims of intellectual property infringement or misappropriation may require us to spend significant time and money, and could in the future prevent us from selling our tests or impact our stock price.*

Our commercial success will depend in part on our avoiding infringement of patents and proprietary rights of third parties, including for example the intellectual property rights of competitors. As we continue to commercialize our tests in their current or an updated form, launch different and expanded tests, and enter new markets, competitors might claim that our tests infringe or misappropriate their intellectual property rights as part of business strategies designed to impede our successful commercialization and entry into new markets. Our activities may be subject to claims that we infringe or otherwise violate patents or other intellectual property rights owned or controlled by third parties. We cannot assure you that our operations do not, or will not in the future, infringe existing or future patents. We may be unaware of patents that a third party, including for example a competitor in the genetic testing market, might assert are infringed by our business. There may also be patent applications that, if issued as patents, could be asserted against us. Third parties making claims against us for infringement or misappropriation of their intellectual property rights may seek and obtain injunctive or other equitable relief, which could effectively block our ability to perform our tests. Further, if a patent infringement suit were brought against us, we could be forced to stop or delay our development or sales of any tests or other activities that are the subject of such suit. Defense of these claims, regardless of merit, could cause us to incur substantial expenses and be a substantial diversion of our employee resources. Any adverse ruling or perception of an adverse ruling in defending ourselves could have a material adverse impact on our business and stock price. In the event of a successful claim of infringement against us by a third party, we may have to (1) pay substantial damages, possibly including treble damages and attorneys' fees if we are found to have willfully infringed patents; (2) obtain one or more licenses, which may not be available on commercially reasonable terms (if at all); (3) pay royalties; and/or (4) redesign any infringing tests or other activities, which may be impossible or require substantial time and monetary expenditure, all of which could have a material adverse impact on our cash position and business and financial condition.

If licenses to third-party intellectual property rights are or become required for us to engage in our business, we may be unable to obtain them at a reasonable cost, if at all. Even if such licenses are available, we could incur substantial costs related to royalty payments for licenses obtained from third parties, which could negatively affect our gross margins. Moreover, we could encounter delays in the introduction of tests while we attempt to develop alternatives. Defense of any lawsuit or failure to obtain any of these licenses on favorable terms could prevent us from commercializing tests, which could materially affect our ability to grow and thus adversely affect our business and financial condition.

**Developments in patent law could have a negative impact on our business.**

Although we view current U.S. Supreme Court precedent to be aligned with our belief that naturally occurring DNA sequences and detection of natural correlations between observed facts (such as patient genetic data) and an understanding of that fact’s implications (such as a patient’s risk of disease associated with certain genetic variations) should not be patentable, it is possible that subsequent determinations by the U.S. Supreme Court or other federal courts could limit, alter or potentially overrule current law. Moreover, from time to time the U.S. Supreme Court, other federal courts, the United States Congress or the U.S. Patent and Trademark Office, or USPTO, may change the standards of patentability, and any such changes could run contrary to, or otherwise be inconsistent with, our belief that naturally occurring DNA sequences and detection of natural correlations between observed facts and an understanding of that fact’s implications should not be patentable, which could result in third parties newly claiming that our business practices infringe patents drawn from categories of patents which we currently view to be invalid as directed to unpatentable subject matter. For example, the U.S. Senate Judiciary Committee, Subcommittee on Intellectual Property held hearings in 2019 regarding a legislative proposal that would overrule current U.S. Supreme Court precedent concerning the scope of patentable subject matter. Our President and Chief Executive Officer, Sean George, appeared before this subcommittee. If such proposal were to be formulated as a bill and enacted into law, there could be an increase in third-party claims to patent rights over
correlations between patient genetic data and its interpretation and such third parties may assert that our business practices infringe some of those resulting patent rights.

**Our inability to effectively protect our proprietary technologies, including the confidentiality of our trade secrets, could harm our competitive position.**

We currently rely upon trade secret protection and copyright, as well as non-disclosure agreements and invention assignment agreements with our employees, consultants and third parties, and to a limited extent patent protection, to protect our confidential and proprietary information. Although our competitors have utilized and are expected to continue utilizing similar methods and have aggregated and are expected to continue to aggregate similar databases of genetic testing information, our success will depend upon our ability to develop proprietary methods and databases and to defend any advantages afforded to us by such methods and databases relative to our competitors. If we do not protect our intellectual property adequately, competitors may be able to use our methods and databases and thereby erode any competitive advantages we may have.

We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets. In this regard, we have applied, and we intend to continue applying, for patents covering such aspects of our technologies as we deem appropriate. However, we expect that potential patent coverage we may obtain will not be sufficient to prevent substantial competition. In this regard, we believe it is probable that others will independently develop similar or alternative technologies or design around those technologies for which we may obtain patent protection. In addition, any patent applications we file may be challenged and may not result in issued patents or may be invalidated or narrowed in scope after they are issued. Questions as to inventorship or ownership may also arise. Any finding that our patents or applications are unenforceable could harm our ability to prevent others from practicing the related technology, and a finding that others have inventorship or ownership rights to our patents and applications could require us to obtain certain rights to practice related technologies, which may not be available on favorable terms, if at all. If we initiate lawsuits to protect or enforce our patents, or litigate against third-party claims, which would be expensive, and, if we lose, we may lose some of our intellectual property rights. Furthermore, these lawsuits may divert the attention of our management and technical personnel.

We expect to rely primarily upon trade secrets and proprietary know-how protection for our confidential and proprietary information, and we have taken security measures to protect this information. These measures, however, may not provide adequate protection for our trade secrets, know-how or other confidential information. Among other things, we seek to protect our trade secrets and confidential information by entering into confidentiality agreements with employees and consultants. There can be no assurance that any confidentiality agreements that we have with our employees and consultants will provide meaningful protection for our trade secrets and confidential information or will provide adequate remedies in the event of unauthorized use or disclosure of such information. Accordingly, there also can be no assurance that our trade secrets will not otherwise become known or be independently developed by competitors. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, trade secrets may be independently developed by others in a manner that could prevent legal recourse by us. If any of our confidential or proprietary information, such as our trade secrets, were to be disclosed or misappropriated, or if any such information was independently developed by a competitor, our competitive position could be harmed.

**We may not be able to enforce our intellectual property rights throughout the world.**

The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and many companies have encountered significant challenges in establishing and enforcing their proprietary rights outside of the United States. These challenges can be caused by the absence of rules and methods for the establishment and enforcement of intellectual property rights outside of the United States. In addition, the legal systems of some countries, particularly developing countries, do not favor the enforcement of patents and other intellectual property protection, especially those relating to healthcare. This could make it difficult for us to stop the infringement of our patents, if obtained, or the misappropriation of our other intellectual property rights. For example, many foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties. In addition, many countries limit the enforceability of patents against third parties, including government agencies or government contractors. In these countries, patents may provide limited or no benefit. Patent protection must ultimately be sought on a country-by-country basis, which is an expensive and time-consuming process with uncertain outcomes. Accordingly, we may choose not to seek patent protection in certain countries, and we will not have the benefit of patent protection in such countries. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. Accordingly, our efforts to protect our intellectual property rights in such countries may be
inadequate. In addition, changes in the law and legal decisions by courts in the United States and foreign countries may affect our ability to obtain adequate protection for our technology and the enforcement of intellectual property.

Third parties may assert that our employees or consultants have wrongfully used or disclosed confidential information or misappropriated trade secrets.

We employ individuals who were previously employed at universities or genetic testing, diagnostic or other healthcare companies, including our competitors or potential competitors. Although we try to ensure that our employees and consultants do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or our employees or consultants have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of a former employer or other third parties. Further, we may be subject to ownership disputes in the future arising, for example, from conflicting obligations of consultants or others who are involved in developing our intellectual property. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Risks related to being a public company

We incur increased costs and demands on management as a result of compliance with laws and regulations applicable to public companies, which could harm our operating results.

As a public company, we incur significant legal, accounting and other expenses, including costs associated with public company reporting requirements. In addition, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, as well as rules implemented by the SEC and the New York Stock Exchange, or NYSE, impose a number of requirements on public companies, including with respect to corporate governance practices. The SEC and other regulators have continued to adopt new rules and regulations and make additional changes to existing regulations that require our compliance. In addition, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, enacted in 2010, includes significant corporate governance and executive-compensation-related provisions. Our management and other personnel need to devote a substantial amount of time to these compliance and disclosure obligations. If these requirements divert the attention of our management and personnel from other aspects of our business concerns, they could have a material adverse effect on our business, financial condition and results of operations. Moreover, these rules and regulations applicable to public companies substantially increase our legal, accounting and financial compliance costs, require that we hire additional personnel and make some activities more time consuming and costly. It may also be more expensive for us to obtain director and officer liability insurance.

If we are unable to maintain effective internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our reported financial information and the market price of our common stock may be negatively affected.

We are required to maintain internal control over financial reporting and to report any material weaknesses in such internal controls. Section 404 of the Sarbanes-Oxley Act requires that we evaluate and determine the effectiveness of our internal control over financial reporting and provide a management report on our internal control over financial reporting. If we have a material weakness in our internal control over financial reporting, we may not detect errors on a timely basis and our financial statements may be materially misstated. We have compiled the system and process documentation necessary to perform the evaluation needed to comply with Section 404 of the Sarbanes-Oxley Act. We need to maintain and enhance these processes and controls as we grow and we have required, and may continue to require, additional personnel and resources to do so.

During the evaluation and testing process, if we identify one or more material weaknesses in our internal controls, our management will be unable to conclude that our internal control over financial reporting is effective. Our independent registered public accounting firm is required to issue an attestation report on the effectiveness of our internal control over financial reporting every fiscal year. Even if our management concludes that our internal control over financial reporting is effective, our independent registered public accounting firm may conclude that there are material weaknesses with respect to our internal controls or the level at which our internal controls are documented, designed, implemented or reviewed.

If we are unable to conclude that our internal control over financial reporting is effective, or if our auditors were to express an adverse opinion on the effectiveness of our internal control over financial reporting because we had one or more material weaknesses, investors could lose confidence in the accuracy and completeness of our
financial disclosures, which could cause the price of our common stock to decline. Internal control deficiencies could also result in the restatement of our financial results in the future.

Risks related to our Convertible Senior Notes

**Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flow from our business to pay our substantial debt.**

In September 2019, we issued $350.0 million aggregate principal amount of our 2.00% Convertible Senior Notes due 2024 in a private placement.

Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness, including the notes, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

**We may not have the ability to raise the funds necessary to settle conversions of the Convertible Senior Notes in cash or to repurchase the notes upon a fundamental change, and our future debt may contain limitations on our ability to pay cash upon conversion or repurchase of the notes.**

Holders of the notes have the right to require us to repurchase all or any portion of their notes upon the occurrence of a fundamental change at a fundamental change repurchase price equal to 100% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest, if any. In addition, upon conversion of the notes, unless we elect to deliver solely shares of our common stock to settle such conversion (other than paying cash in lieu of delivering any fractional share), we will be required to make cash payments in respect of the notes being converted. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of notes surrendered therefor or notes being converted. In addition, our ability to repurchase the notes or to pay cash upon conversions of the notes may be limited by law, by regulatory authority or by agreements governing our future indebtedness. Our failure to repurchase notes at a time when the repurchase is required by the indenture or to pay any cash payable on future conversions of the notes as required by the indenture would constitute a default under the indenture. A default under the indenture or the occurrence of the fundamental change itself could also lead to a default under agreements governing our future indebtedness. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have enough cash on hand or be able to obtain financing at the time we are required to make repurchases of the notes and make cash payments upon conversions thereof.

The conditional conversion feature of the Convertible Senior Notes, if triggered, may adversely affect our financial condition and operating results.

In the event the conditional conversion feature of the notes is triggered, holders of notes will be entitled to convert the notes at any time during specified periods at their option. If one or more holders elect to convert their notes, unless we elect to satisfy our conversion obligation by delivering solely shares of our common stock (other than paying cash in lieu of delivering any fractional share), we would be required to settle a portion or all of our conversion obligation through the payment of cash, which could adversely affect our liquidity. In addition, even if holders do not elect to convert their notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

The accounting method for convertible debt securities that may be settled in cash, such as the notes, could have a material effect on our reported financial results.

In May 2008, the Financial Accounting Standards Board, or FASB, issued FASB Staff Position No. APB 14-1, Accounting for Convertible Debt Instruments That May Be Settled in Cash Upon Conversion (Including Partial Cash Settlement), which has subsequently been codified as Accounting Standards Codification 470-20, Debt with Conversion and Other Options, or ASC 470-20. Under ASC 470-20, an entity must separately account for the liability and equity components of the convertible debt instruments (such as the notes) that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer’s economic interest cost. The effect of ASC 470-20 on the accounting for the notes is that the equity component is required to be included in the additional
paid-in capital section of stockholders’ equity on our consolidated balance sheet at issuance, and the value of the equity component would be treated as original issue discount for purposes of accounting for the debt component of the notes. As a result, we will be required to record a greater amount of non-cash interest expense in current periods presented as a result of the amortization of the discounted carrying value of the notes to their face amount over the term of the notes. We will report larger net losses or lower net income in our financial results because ASC 470-20 will require interest to include both the current period’s amortization of the debt discount and the instrument’s non-convertible coupon interest rate, which could adversely affect our reported or future financial results, the trading price of our common stock and the trading price of the notes.

In addition, under certain circumstances, convertible debt instruments (such as the notes) that may be settled entirely or partly in cash are currently accounted for utilizing the treasury stock method, the effect of which is that the shares issuable upon conversion of the notes are not included in the calculation of diluted net income (loss) per share except to the extent that the conversion value of the notes exceeds their principal amount. Under the treasury stock method, for diluted earnings per share purposes, the transaction is accounted for as if the number of shares of common stock that would be necessary to settle such excess, if we elected to settle such excess in shares, are issued. We cannot be sure that the accounting standards in the future will continue to permit the use of the treasury stock method. If we are unable or otherwise elect not to use the treasury stock method in accounting for the shares issuable upon conversion of the notes, then our diluted earnings per share would be adversely affected. For example, the FASB recently published an exposure draft proposing to amend these accounting standards to eliminate the treasury stock method for convertible instruments and instead require application of the “if-converted” method. Under that method, if it is adopted, diluted net income (loss) per share would generally be calculated assuming that all the notes were converted solely into shares of common stock at the beginning of the reporting period, unless the result would be anti-dilutive. The application of the “if-converted” method may reduce our reported diluted net income (or further increase our diluted net loss, as the case may be) per share.

Risks related to our common stock

Our stock price is volatile, and you may not be able to sell shares of our common stock at or above the price you paid.

The trading price of our common stock is volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. These factors include:

- actual or anticipated fluctuations in our operating results;
- competition from existing tests or new tests that may emerge;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;
- failure to meet or exceed financial estimates and projections of the investment community or that we provide to the public;
- issuance of new or updated research or reports by securities analysts or changed recommendations for our stock;
- our focus on long-term goals over short-term results;
- the timing and magnitude of our investments in the growth of our business;
- actual or anticipated changes in regulatory oversight of our business;
- additions or departures of key management or other personnel;
- disputes or other developments related to our intellectual property or other proprietary rights, including litigation;
- changes in reimbursement by current or potential payers;
- general economic and market conditions; and
- issuances of significant amounts of our common stock.

In addition, the stock market in general, and the market for stock of life sciences companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry factors may seriously affect the market price of our common stock, regardless of our actual operating performance. In addition, in the past, following periods of volatility in the overall market and the market price of a particular company’s securities, securities class action
litigation has often been instituted against these companies. This litigation, if instituted against us, could result in substantial costs and a diversion of our management’s attention and resources.

Sales of a substantial number of shares of our common stock in the public market could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market or the perception that these sales might occur could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales may have on the prevailing market price of our common stock. In addition, the sale of substantial amounts of our common stock could adversely impact its price. As of June 30, 2020, we had outstanding approximately 131.3 million shares of our common stock, options to purchase approximately 3.5 million shares of our common stock (of which approximately 2.9 million were exercisable as of that date), outstanding restricted stock units representing approximately 8.2 million shares of our common stock (which includes an estimated number of Time-based RSUs and PRSUs granted in connection with our acquisition of Singular Bio), outstanding Series A convertible preferred stock convertible into approximately 0.1 million shares of our common stock and warrants to purchase 0.4 million shares of our common stock. The foregoing does not include additional shares that may be issuable in connection with indemnification hold-backs related to our acquisitions, upfront consideration of 30.0 million shares and 27.0 million shares which may be issuable upon the achievement of certain milestones related to the pending merger with ArcherDX, additional 16.3 million shares issuable pursuant to the Securities Purchase Agreement entered into in connection with our pending merger with ArcherDX, warrants to purchase 1.0 million shares of our common stock to be issued in connection with a new senior secured term loan facility to be entered into in connection with the pending merger with ArcherDX, additional shares that may be issuable upon the achievement of certain milestones in connection with our acquisitions of Jungla and Genelex, inducement awards to be issued in connection with our acquisition of Diploid, or shares that may be issuable in the future in connection with the Convertible Senior Notes. In addition, up to $47.7 million of our common stock was available for sale as of June 30, 2020 pursuant to our “at the market” sales agreement. The sale or the availability for sale of a large number of shares of our common stock in the public market could cause the price of our common stock to decline.

If securities or industry analysts issue an adverse opinion regarding our stock or do not publish research or reports about our company, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that equity research analysts publish about us and our business. We do not control these analysts or the content and opinions included in their reports. Securities analysts may elect not to provide research coverage of our company and such lack of research coverage may adversely affect the market price of our common stock. The price of our common stock could also decline if one or more equity research analysts downgrade our common stock, change their price targets, issue other unfavorable commentary or cease publishing reports about us or our business. If one or more equity research analysts cease coverage of our company, we could lose visibility in the market, which in turn could cause our stock price to decline.

We have never paid dividends on our capital stock, and we do not anticipate paying dividends in the foreseeable future.

We have never paid dividends on any of our capital stock and currently intend to retain any future earnings to fund the growth of our business. Any determination to pay dividends in the future will be at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, general business conditions and other factors that our board of directors may deem relevant. As a result, capital appreciation, if any, of our common stock will be the sole source of gain for the foreseeable future.

Anti-takeover provisions in our charter documents and under Delaware law could discourage, delay or prevent a change in control and may affect the trading price of our common stock.

Provisions in our restated certificate of incorporation and our amended and restated bylaws may have the effect of delaying or preventing a change of control or changes in our management. Our restated certificate of incorporation and amended and restated bylaws include provisions that:

• authorize our board of directors to issue, without further action by the stockholders, up to 20,000,000 shares of undesignated preferred stock;
• require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
• specify that special meetings of our stockholders can be called only by our board of directors, our chairman of the board or our chief executive officer;
• establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;
• establish that our board of directors is divided into three classes, Class I, Class II and Class III, with each class serving staggered terms;
• provide that our directors may be removed only for cause;
• provide that vacancies on our board of directors may, except as otherwise required by law, be filled only by a majority of directors then in office, even if less than a quorum; and
• require a super-majority of votes to amend certain of the above-mentioned provisions as well as to amend our bylaws generally.

In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. Section 203 generally prohibits us from engaging in a business combination with an interested stockholder subject to certain exceptions.

Our certificate of incorporation designates the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees.

Our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for:
• any derivative action or proceeding brought on our behalf;
• any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or other employees to us or our stockholders;
• any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law; or
• any action asserting a claim against us governed by the internal affairs doctrine.

Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and consented to the provisions of our certificate of incorporation described above. This choice of forum provision may limit a stockholder’s ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find these provisions of our certificate of incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition or results of operations.
### ITEM 6. Exhibits.

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1+^</td>
<td>Agreement and Plan of Merger, dated as of March 10, 2020, by and among Invitae Corporation, Yasawa Merger Sub A Inc., Yasawa Merger Sub B LLC, YouScript Incorporated, and Fortis Advisors LLC, as representative of YouScript Incorporated’s stockholders.</td>
</tr>
<tr>
<td>2.2+^</td>
<td>Unit Purchase Agreement, dated as of March 10, 2020, by and among Invitae Corporation, David Colaizzi, Chris Howlett, Anthony Muhlenkamp, Gerald Schneider, and Matt Lehrian.</td>
</tr>
<tr>
<td>4.1</td>
<td>Registration Rights Agreement by and among Invitae Corporation and certain stockholders of YouScript Incorporated.</td>
</tr>
<tr>
<td>4.2</td>
<td>Registration Rights Agreement by and among Invitae Corporation, CFH Management, L.P., as assignee of David Colaizzi, Chris Howlett, Anthony Muhlenkamp, Gerald Schneider, and Matt Lehrian.</td>
</tr>
<tr>
<td>4.3</td>
<td>Form of Registration Rights Agreement by and among Invitae Corporation and certain investors party to the Securities Purchase Agreement (incorporated by reference to Exhibit 10.2 to the Registrant’s Current Report on Form 8-K filed June 24, 2020).</td>
</tr>
<tr>
<td>10.1#</td>
<td>Invitae Corporation 2015 Stock Incentive Plan, as amended and restated as of June 12, 2020.</td>
</tr>
<tr>
<td>10.3</td>
<td>Commitment Letter, dated as of June 21, 2020, by and between Invitae Corporation and Perceptive Credit Holdings III, LP (incorporated by reference to Exhibit 10.3 to the Registrant’s Current Report on Form 8-K filed June 24, 2020).</td>
</tr>
<tr>
<td>10.4#</td>
<td>Offer Letter, dated as of June 1, 2020, between Invitae Corporation and Kenneth D. Knight (incorporated by reference to Exhibit 10.1 to the Registrant’s Current Report on Form 8-K filed June 26, 2020).</td>
</tr>
<tr>
<td>31.1</td>
<td>Principal Executive Officer’s Certifications Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</td>
</tr>
<tr>
<td>31.2</td>
<td>Principal Financial Officer’s Certifications Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</td>
</tr>
<tr>
<td>32.1*</td>
<td>Certification Pursuant to 18 U.S.C. § 1350 (Section 906 of Sarbanes-Oxley Act of 2002).</td>
</tr>
<tr>
<td>32.2*</td>
<td>Certification Pursuant to 18 U.S.C. § 1350 (Section 906 of Sarbanes-Oxley Act of 2002).</td>
</tr>
<tr>
<td>101.INS</td>
<td>Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.</td>
</tr>
<tr>
<td>101.CAL</td>
<td>Inline XBRL Taxonomy Extension Calculation Linkbase.</td>
</tr>
<tr>
<td>101.DEF</td>
<td>Inline XBRL Taxonomy Extension Definition Linkbase.</td>
</tr>
<tr>
<td>101.LAB</td>
<td>Inline XBRL Taxonomy Extension Label Linkbase.</td>
</tr>
<tr>
<td>101.PRE</td>
<td>Inline XBRL Taxonomy Extension Presentation Linkbase.</td>
</tr>
<tr>
<td>104</td>
<td>Cover Page Interactive Data File (the cover page XBRL tags are embedded within the Inline XBRL document).</td>
</tr>
</tbody>
</table>

# Indicates management contract or compensatory plan or arrangement.

+ Certain schedules and exhibits to this agreement have been omitted pursuant to Item 601(b) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the SEC upon request.

^ Portions of this Exhibit have been redacted in accordance with Item 601 of Regulation S-K.

* In accordance with Item 601(b)(32)(ii) of Regulation S-K and SEC Release No. 34-47986, the certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Form 10-Q and will not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934 (the “Exchange Act”) or deemed to be incorporated by reference into any filing under the Exchange Act or the Securities Act of 1933 except to the extent that the registrant specifically incorporates it by reference.
SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

INVITAE CORPORATION

By: /s/ Sean E. George, Ph.D.  
Sean E. George, Ph.D.  
President and Chief Executive Officer  
Principal Executive Officer

By: /s/ Shelly D. Guyer  
Shelly D. Guyer  
Chief Financial Officer  
Principal Financial Officer

Date: August 4, 2020
[*] Indicates that certain information in this exhibit has been excluded because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

AGREEMENT AND PLAN OF MERGER

among

INVITAE CORPORATION,

YASAWA MERGER SUB A INC.,

YASAWA MERGER SUB B LLC,

YOUSCRIPT INCORPORATED

and

FORTIS ADVISORS LLC,

solely in its capacity as HOLDERS’ REPRESENTATIVE

March 10, 2020
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AGREEMENT AND PLAN OF MERGER

THIS AGREEMENT AND PLAN OF MERGER (this “Agreement”) is entered into and dated as of March 10, 2020 (the “Agreement Date”), by and among: (i) Invitae Corporation, a Delaware corporation (“Parent”); (ii) Yasawa Merger Sub A Inc., a Delaware corporation and a wholly owned subsidiary of Parent (“Merger Sub A”); (iii) Yasawa Merger Sub B LLC, a Delaware limited liability company and a wholly owned subsidiary of Parent (“Merger Sub B”); (iv) YouScript Incorporated, a Delaware corporation (the “Company”); and (v) Fortis Advisors LLC, a Delaware limited liability company, solely in its capacity as the representative, exclusive agent and attorney-in-fact of the Holders (the “Holders’ Representative”), but solely with respect to the provisions expressly applicable to the Holders’ Representative as set forth herein. Each of Parent, Merger Sub A, Merger Sub B, the Company and the Holders’ Representative may be individually referred to herein as a “Party” and collectively referred to herein as the “Parties.” Capitalized terms used herein have the meanings ascribed thereto in Article I or elsewhere in this Agreement as identified in Article I.

RECITALS

WHEREAS, the Company, Parent and Merger Sub A intend to effect a merger of Merger Sub A with and into the Company (the “Reverse Merger”) in accordance with this Agreement and the General Corporation Law of the State of Delaware (the “DGCL”), whereupon consummation of the Reverse Merger, Merger Sub A shall cease to exist and the Company shall become a wholly-owned Subsidiary of Parent;

WHEREAS, as part of the same overall transaction, promptly following the Reverse Merger, the Company, Parent and Merger Sub B intend to effect a merger of the Company with and into Merger Sub B (the “Forward Merger” and, together with the Reverse Merger, the “Mergers”) in accordance with this Agreement and the Delaware Limited Liability Company Act (the “DLLCA”), whereupon consummation of the Forward Merger, the Company shall cease to exist and Merger Sub B shall survive the Forward Merger as a continuing wholly-owned Subsidiary of Parent;

WHEREAS, the respective board of directors of Parent, the Company and Merger Sub A, and the sole member of Merger Sub B, have each approved, adopted and declared advisable this Agreement and the transactions contemplated hereby, including the Mergers, in accordance with the DGCL, the DLLCA and upon the terms and subject to the conditions set forth herein;

WHEREAS, in connection with the transactions contemplated hereby, each option (a “Company Option”) to acquire shares of the Company’s Common Stock, par value $0.0001 per share (the “Company Stock”) that is unexpired, unexercised and outstanding immediately prior to the Closing shall (i) become fully vested with respect to all shares exercisable thereunder (other than any Company Option held by a former Employee that is, by its terms, no longer eligible for vesting), and (ii) be cancelled in exchange for the right to receive (without interest) the consideration set forth herein;

WHEREAS, in connection with the transactions contemplated hereby, those certain Convertible Promissory Notes issued by the Company to the Company Noteholders, to the extent
such Company Notes remain outstanding and unpaid immediately prior to the Closing, shall have converted in accordance with their respective terms into shares of Company Stock, which shares shall be entitled to the right to receive (without interest) the consideration set forth herein, and otherwise cancelled;

WHEREAS, promptly following the execution and delivery of this Agreement, and as an inducement to Parent’s willingness to enter into this Agreement, in accordance with Sections 228(a) and 228(c) of the DGCL, the Company has agreed to deliver a written consent and joinder agreement in the form attached as Exhibit A hereto (a “Written Consent and Joinder Agreement”), executed by Holders which, together with the Holders that previously signed Support Agreements (as described below), hold at least 90% of the outstanding shares of Company Stock (including shares of Company Stock issuable upon conversion of the Company Notes), pursuant to which such Holders will do the following: (i) approve this Agreement, the Mergers and the other transactions and arrangements contemplated hereby; (ii) agree to the indemnification provisions set forth herein; (iii) make customary representations and warranties relating to an investment in shares of Parent Common Stock (including, as applicable, with the assistance of a “purchaser representative” for such purpose) if receiving shares of Parent Common Stock pursuant to this Agreement; and (iv) release the Company against certain claims;

WHEREAS, concurrent with the execution and delivery of this Agreement, the Company has delivered to Parent a support agreement in the form attached as Exhibit B hereto (a “Support Agreement”), executed by certain holders of Company Stock pursuant to which such Holders agree to approve this Agreement, the Mergers and the other transactions and arrangements contemplated hereby and otherwise take certain actions in support thereof; and

WHEREAS, it is intended that for U.S. federal income Tax purposes the Mergers contemplated herein shall be treated as a single integrated transaction and qualify as a “reorganization” within the meaning of Section 368(a) of the Code.

NOW, THEREFORE, in consideration of the foregoing and the mutual agreements and covenants set forth below, and intending to be legally bound hereby, the Parties hereby agree as follows:

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Article I
CERTAIN DEFINITIONS; CONSTRUCTION

1.1 Certain Definitions. The following terms shall have the following meanings in this Agreement:

“Accounting Methodology” means the accounting methods, practices and procedures used to prepare the Financial Statements.

“Accredited Investor” means (i) a Person that is an “accredited investor” as defined in Rule 501 of Regulation D of the Securities Act, and (ii) any other Holder that appoints a “purchaser representative” in accordance with the instructions set forth in such Holder’s duly executed and delivered Written Consent and Joinder Agreement or Support Agreement, as applicable.

“Action” means any claim, controversy, suit, action or cause of action, litigation, arbitration, investigation, opposition, interference, audit, hearing, demand, assessment, complaint, citation, proceeding, order or other legal proceeding (whether sounding in contract or tort or otherwise, whether civil, criminal, administrative or otherwise and whether brought at law or in equity or under arbitration or administrative regulation).

“Affiliate” means, with respect to any Person, any other Person that, directly or indirectly, controls, or is controlled by, or is under common control with, such Person. For this purpose, “control” (including, with its correlative meanings, “controlled by” and “under common control with”) means the possession, directly or indirectly, of the power to direct or cause the direction of management or policies of a Person, whether through the ownership of securities or partnership or other ownership interests, by contract or otherwise. For the avoidance of doubt, from and after the Closing Date, no member of the Company Group shall be deemed to be an Affiliate of the Holders.

“Aggregate Exercise Amount” means the aggregate exercise price of all Company Options outstanding and unexercised as of immediately prior to the Closing.

“Aggregate Option Payment” means the aggregate amount payable to the Company Optionholders pursuant to Section 2.7(a) (A).

“Anti-Kickback Statute” means the Federal Health Care Program Anti-Kickback Statute, 42 U.S.C. § 1320a-7b(b), and all regulations promulgated thereunder.

“Base Cash Amount” means $25,000,000.

“Base Purchase Price” means $79,333,000.

“Business” means the business of providing clinical decision support tools software designed for use by healthcare professionals to flag for appropriate pharmacogenetic testing and provide evidence on drug-drug, drug-gene and multi-drug-gene interactions.
“Business Day” means any day other than a Saturday, Sunday or any other day on which banking institutions in San Francisco, California are authorized or required by Law or order to remain closed.

“CERCLA” is defined within the definition of “Environmental Laws” below.

“Change in Control Payments” means (i) any bonus, severance or other payment that is created, accelerated, accrues or becomes payable by any member of the Company Group to any present or former director, stockholder, Employee or Consultant, including pursuant to an employment agreement, Company Plan or any other Contract (including Post-Closing Retention Bonuses, as defined below), and (ii) without duplication of any other amounts included within the definition of Company Transaction and Bonus Expenses, any other payment, expense, fee or Tax that accrues or becomes payable by any member of the Company Group to any Governmental Authority or other Person under any Law or Contract, including in connection with the making of any filings, the giving of any notices or the obtaining of any consents, authorizations or approvals, in each case of each of (i) and (ii), as a result of the consummation of the Transactions (including the Mergers) or in connection with the execution and delivery of the Agreement or any other Transaction Agreement.

“Charter Documents” means, with respect to any entity, the certificate of incorporation and bylaws or similar organizational documents of such entity.

“Closing Cash” means the fair market value of all cash and cash equivalents held by the Company Group as of the Closing (before taking into account the consummation of the transactions contemplated hereby), determined in accordance with the Accounting Methodology, excluding, to the extent applicable, (i) outstanding (uncleared) checks, drafts, wire transfers or deposits in transit, and other debits and credits in-process, (ii) restricted cash balances, (iii) amounts held in escrow, (iv) amounts held in banks outside of the United States in accounts that cannot be readily expatriated due to foreign exchange controls or other applicable Laws, (v) the proceeds of any casualty loss with respect to any asset held or owned by the Company Group (to the extent that any such asset has not been repaired or replaced or the liability for the repair or replacement of such asset has not been paid or accrued as a current liability), and (vi) cash received with respect to unperformed work or installations and reflected as deferred revenues on the Estimated Balance Sheet.

“Closing Debt” means the aggregate principal amount of, and accrued interest on, all Company Debt as of the Closing.

“Closing Net Working Capital” means, as of the Closing, an amount equal to (i) the sum of (x) the current assets of the Company Group, other than cash and cash equivalents, reduced by (ii) the current liabilities of the Company Group (excluding Company Debt and Unpaid Transaction Expenses), in each case as determined in accordance with the Accounting Methodology.

“Collection and Use” (and its variants) means the collection, use, interception, storage, receipt, purchase, sale, maintenance, transmission, transfer, disclosure, processing and/or use of Personal Data.

“Company Debt” means, as at any time with respect to the Company Group, without duplication, all Liabilities with respect to principal, accrued and unpaid interest, penalties, premiums and any other fees, expenses and breakage costs on and other payment obligations arising under any (i) indebtedness for borrowed money (including amounts outstanding under overdraft facilities), (ii) indebtedness issued in exchange for or in substitution for borrowed money, (iii) obligations for the deferred purchase price of property, goods or services other than trade payables arising in the Ordinary Course of Business (but including any deferred purchase price Liabilities, earnouts, contingency payments, seller notes, promissory notes or similar Liabilities, in each case, related to past acquisitions by any member of the Company Group and for the avoidance of doubt, whether or not contingent), (iv) obligations evidenced by any note, bond, debenture, guarantee or other debt security or similar instrument or Contract, (v) liabilities under capitalized leases, (vi) obligations, contingent or otherwise, in respect of amounts drawn under letters of credit and banker’s acceptance or similar credit transactions, (vii) obligations under Contracts relating to interest rate protection or other hedging arrangements, to the extent payable if such Contract is terminated at Closing, and (viii) guarantees of the types of obligations described in sub clauses (i) through (vii) above. For the avoidance of doubt, the Company Notes shall not constitute Company Debt for the purposes of this Agreement.

“Company Fundamental IP Representations” means the representations and warranties contained in Section 3.15 (Intellectual Property; Technology; Privacy and Security; Information Systems; Disaster Recovery).

“Company Fundamental Representations” means the representations and warranties contained in Section 3.1 (Organizational Matters), Section 3.2 (a), (b) and (c) (Power and Authority; Due Authorization of Agreement; Valid and Binding Agreements), Section 3.3 (Capitalization) and Section 3.20 (Brokers and Other Advisors), the Company Fundamental IP Representations and the Company Fundamental Tax Representations.

“Company Fundamental Tax Representations” means the representations and warranties contained in Section 3.9 (Taxes).

“Company Intellectual Property Rights” means all Intellectual Property Rights owned by the Company Group or used by the Company Group in connection with, the Business of the Company Group as currently conducted, including all Intellectual Property Rights in and to Company Technology (but excluding Software used under Shrink Wrap Licenses and Public Software).

“Company Material Adverse Effect” means a Material Adverse Effect with respect to the Company Group, taken as a whole.

“Company Noteholders” means (i) with respect to any time before the Closing, collectively, the holders of record of Company Notes outstanding as of such time and (ii) with respect to any
time at or after the Closing, collectively, the holders of record of Company Notes outstanding as of immediately prior to the Closing.

“Company Notes” means convertible promissory notes issued by the Company.

“Company Option Plan” means the Company’s 2016 Stock Option Plan.

“Company Optionholder” means (i) with respect to any time before the Closing, collectively, the holders of record of Company Options outstanding as of such time and (ii) with respect to any time at or after the Closing, collectively, the holders of record of Company Options outstanding as of immediately prior to the Closing.

“Company Plans” means (i) “employee benefit plans” (as defined in Section 3(3) of ERISA, as amended), (ii) individual employment, consulting, change in control, severance or other agreements or arrangements and (iii) other benefit plans, policies, agreements or arrangements, including bonus or other incentive compensation, stock purchase, equity or equity-based compensation, deferred compensation, profit sharing, change in control, severance, pension, retirement, welfare, sick leave, vacation, loans, salary continuation, health, dental, disability, flexible spending account, service award, fringe benefit, life insurance and educational assistance plans, policies, agreements or arrangements, whether written or oral, under which any Employee, Consultant or director of the Company participates and which is maintained, contributed to or participated in by the Company, or with respect to which the Company has or may have any obligation or liability, contingent or otherwise.

“Company Stockholder” means (i) with respect to any time before the Closing, collectively, the holders of record of shares of Company Stock outstanding as of such time and (ii) with respect to any time at or after the Closing, collectively, the holders of record of shares of Company Stock outstanding as of immediately prior to the Closing.

“Company Technology” means any and all Technology that is owned by any member of the Company Group or used in connection with the Business of any member of the Company Group as currently conducted, including Proprietary Software (but excluding Software used under Shrink Wrap Licenses and Public Software).

“Company Transaction and Bonus Expenses” means an amount equal to (i) the aggregate fees and expenses payable or reimbursable by any member of the Company Group to third parties in connection with negotiation, entering into and consummation of this Agreement and the Transactions, including the fees and expenses of investment bankers, finders, consultants, attorneys, accountants and other advisors engaged by any member of the Company Group in connection with the Transactions, plus (ii) all Change in Control Payments, plus (iii) all employer-portion payroll or employment Taxes incurred in connection with the treatment of the Company Options in connection with the Transactions (including cancellation, exercise or payment) or any Change in Control Payments, plus (iv) the D&O Tail Insurance policy premium amount. For the avoidance of doubt, the following shall not constitute Company Transaction and Bonus Expenses: (x) any severance payments as a result of any terminations effected by Parent after the Closing or requested by Parent in connection with the Closing; (y) any “double trigger” change of control obligations.
which have, as a second trigger, any termination of service effected by Parent following the Closing or requested by Parent in connection with the Closing; and (z) any retention or similar bonus awarded by Parent or committed by Parent to be paid following the Closing. For the avoidance of doubt, the retention bonus payments described in Section 5.1 of the Disclosure Schedule (the “Post-Closing Retention Bonuses”) shall constitute Company Transaction and Bonus Expenses.

“Confidentiality Agreement” means that certain Mutual Confidentiality and Nondisclosure Agreement, effective as of February 18, 2019, by and between the Company and Parent.

“Consenting Holder” means a Holder that has consented to the Transactions and delivered a duly completed and executed Written Consent and Joinder Agreement or Support Agreement, as applicable.

“Consenting Shares” means all shares of Company Stock (including shares of Company Stock issuable upon conversion of the Company Notes) held by the Consenting Holders.

“Consultant” means Current Consultants, together with any former individual consultant or independent contractor or director (who is not an Employee) of the Company Group.

“Contract” means any contract, loan or credit agreement, debenture, note, guaranty, bond, mortgage, indenture, deed of trust, license, lease or other agreement, arrangement or instrument (in each case, as applicable, whether written or oral) that is legally binding.

“Current Consultant” means any current individual consultant or independent contractor or director of the Company Group (who is not an Employee).

“Current Employee” means any current employee or officer of the Company Group.

“Disclosure Schedule” means a document delivered by the Company to Parent referring to the representations and warranties in ARTICLE III.

“Dissenting Shares” means shares of Company Stock held by a Holder who has properly demanded and not effectively withdrawn or lost such Holder’s appraisal, dissenters’ or similar rights for such shares under the DGCL.

“DOL” means the United States Department of Labor.

“DR Plans” means the Company Group’s disaster recovery and business continuity plans.

“Employee” means Current Employees, together with any former employees or officers of the Company Group.

“Environmental Laws” means all applicable Laws relating to the environment, preservation or reclamation of natural resources, the presence, management or Release of, or exposure to, Hazardous Materials, or to human health and safety, including the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. § 9601 et seq.) (“CERCLA”), the Hazardous Materials Transportation Act (49 U.S.C. § 5101 et seq.), the Resource Conservation and Recovery
Act (42 U.S.C. § 6901 et seq.), the Clean Water Act (33 U.S.C. § 1251 et seq.), the Clean Air Act (42 U.S.C. § 7401 et seq.), the Safe Drinking Water Act (42 U.S.C. § 300f et seq.), the Toxic Substances Control Act (15 U.S.C. § 2601 et seq.), the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. § 136 et seq.) and the Occupational Safety and Health Act (29 U.S.C. § 651 et seq.), each of their state and local counterparts or equivalents, each of their foreign and international equivalents and any transfer of ownership notification or approval statute relating to actual or potential environmental obligations, as each has been amended and the regulations promulgated pursuant thereto.

“Environmental Liabilities” means, with respect to any Person, all liabilities, obligations, responsibilities, remedial actions, losses, damages, punitive damages, consequential damages, treble damages, liens, costs and expenses (including all reasonable fees, disbursements and expenses of counsel, experts and consultants and costs of investigation and feasibility studies), fines, penalties, sanctions and interest incurred as a result of any Action, claim or demand by any other Person or in response to any violation of Environmental Law, whether known or unknown, accrued or contingent, whether based in contract, tort, implied or express warranty, strict liability, criminal or civil statute or administrative regulation, to the extent based upon, related to, or arising under or pursuant to any Environmental Law, environmental Permit, order or agreement with any Governmental Authority or other Person, which relates to any environmental, health or safety condition, violation of Environmental Law or Release or threatened Release of Hazardous Materials.

“ERISA” means the Employee Retirement Income Security Act of 1974, as amended, and the rules and regulations promulgated thereunder, all as from time to time in effect, and any successor Laws thereto.

“European Economic Area” means the member countries of the European Union, Norway, Iceland and Lichtenstein.

“Expense Fund Amount” means $150,000.


“Final Purchase Price” means the sum of (i) the Base Purchase Price, minus (ii) the Closing Debt, minus (iii) the amount, if any, by which the Net Working Capital Threshold exceeds the Closing Net Working Capital, plus (iv) the amount, if any, by which the Closing Net Working Capital exceeds the Net Working Capital Threshold, plus (v) the aggregate amount of Closing Cash, less (vi) Unpaid Transaction Expenses, plus (vii) the Aggregate Exercise Amount.

“Fully Diluted Shares of Company Stock” means the sum, without duplication, of (a) the aggregate number of shares of Company Stock that are issued and outstanding immediately prior to the Closing, plus (b) the aggregate number of shares of Company Stock issuable upon exercise or conversion, as applicable, of all Company Options and the Company Notes immediately prior to the Closing (assuming, for this purpose, (x) acceleration of all vesting periods applicable to the Company Options, and (y) conversion of the Company Notes into Company Stock in lieu of cash).
“Fundamental Representations” means, collectively, the Company Fundamental Representations and the Parent Fundamental Representations.

“GAAP” means the generally accepted accounting principles in the United States.

“Genelex” means Genetics Solutions LLC, a Pennsylvania limited liability company dba Genelex.

“Governmental Authority” means any (i) nation, region, state, county, city, town, village, district or other jurisdiction, (ii) federal, state, local, municipal, foreign or other government, (iii) department, agency or instrumentality of a foreign or other government, including any state-owned or state-controlled instrumentality of a foreign or other government, (iv) governmental or quasi-governmental entity of any nature (including any governmental agency, branch, department or other entity and any court or other tribunal), (v) international or multinational organization formed by states or governments, (vi) organization that is designated by executive order pursuant to Section 1 of the United States International Organizations Immunities Act (22 U.S.C. 288 of 1945), as amended and the rules and regulations promulgated thereunder, (vii) other body entitled to exercise any administrative, executive, judicial, legislative, police or regulatory authority or (viii) any arbitrator.

“Hazardous Materials” means any material, substance or waste that is regulated or classified under or pursuant to any Environmental Law as “hazardous,” “toxic,” a “pollutant,” a “contaminant,” “radioactive” or words of similar meaning or effect, including petroleum and its by-products, asbestos, polychlorinated biphenyls, radon, mold, urea formaldehyde insulation, chlorofluorocarbons and all other ozone-depleting substances.

“Health Care Laws” means any Laws relating to health care regulatory and reimbursement matters, including (i) the Federal Ethics in Patient Referrals Act, 42 U.S.C. § 1395nn, and all regulations promulgated thereunder, (ii) the Anti-Kickback Statute, (iii) the False Claims Act, (iv) the Occupational Safety and Health Act, and all regulations, agency guidance or similar legal requirements promulgated thereunder, (v) the Federal Food, Drug and Cosmetic Act, 21 U.S.C. § 321 et seq., and all regulations, agency guidance or similar legal requirements promulgated thereunder, (vi) the Public Health Service Act, 42 U.S.C. § 201 et seq., and all regulations, agency guidance or similar legal requirements promulgated thereunder, (vii) the Clinical Laboratory Improvement Amendments, 42 U.S.C. § 263a, and all regulations, agency guidance or similar legal requirements promulgated thereunder, (viii) the Medicare Act, 42 U.S.C. § 1395 et seq., and all regulations, agency guidance, or similar legal requirements promulgated thereunder, (ix) state self-referral, anti-kickback, fee-splitting and patient brokering Laws, (x) Information Privacy and Security Laws, including those related to genetic testing and the privacy of genetic testing results, and (xi) state Laws governing the licensure and operation of clinical laboratories and billing for clinical laboratory services.

“HIPAA” means, collectively, the Health Insurance Portability and Accountability Act of 1996 as amended by the Health Information Technology for Economic and Clinical Health Act (“HITECH”), implementing regulations promulgated thereunder and related guidance issued from time to time.
“Holder Indemnified Persons” means the Holders and their Affiliates and each of their respective equity holders, directors, officers, employees, agents, successors and assigns.

“Holders” means, collectively, the Company Stockholders, the Company Noteholders and the Company Optionholders.

“Holders’ Representative Losses” means any and all losses, liabilities, damages, claims, penalties, fines, judgments, amounts paid in settlement, forfeitures, actions, fees, costs and expenses of any nature (including the reasonable fees and expenses of counsel, other skilled professionals and experts and their staffs and all expense of document location, duplication and shipment and in connection with seeking recovery from insurers) arising out of or in connection with the Holders’ Representative’s execution and performance of this Agreement and any agreements ancillary hereto.

“Indemnification Hold-Back Cash Amount” means the product of (i) the Indemnification Hold-Back Value multiplied by (ii) the Indemnification Hold-Back Cash Proportion.

“Indemnification Hold-Back Cash Proportion” means the quotient of (i) the number of shares of Company Stock reflected in the Fully Diluted Shares of Company Stock that are either (x) Consenting Shares held by Holders that are not Accredited Investors or (y) not Consenting Shares (which category shall include, for the avoidance of doubt, any shares of Company Stock issuable upon exercise or conversion, as applicable, of all Company Options (assuming, for this purpose, acceleration of all vesting periods applicable to the Company Options)), divided by (ii) the Fully Diluted Shares of Company Stock.

“Indemnification Hold-Back Share Amount” means the sum of (i) the Indemnification Hold-Back Value minus (ii) the Indemnification Hold-Back Cash Amount.

“Indemnification Hold-Back Shares” means a number of shares of Parent Common Stock equal to the quotient of (i) the Indemnification Hold-Back Share Amount, divided by (ii) the Merger Consideration Share Price, which Merger Consideration Share Price shall be adjusted, as of the applicable date of measurement, by any stock split, division or subdivision of shares, stock dividend, reverse stock split, consolidation of shares, reclassification, recapitalization or other similar transaction with respect to shares of Parent Common Stock between the Agreement Date and such date of measurement.

“Indemnification Hold-Back Shares Value” means, as of the applicable date of measurement, the cash value of the Indemnification Hold-Back Shares which remain subject to the Offset Right in accordance with Section 8.3, based on the volume weighted average trading price for shares of Parent Common Stock on the New York Stock Exchange (or any other exchange which is then the primary exchange upon which shares of Parent Common Stock are traded) for the immediately preceding period of twenty (20) trading days, as adjusted by any stock split, division or subdivision of shares, stock dividend, reverse stock split, consolidation of shares, reclassification, recapitalization or other similar transaction with respect to shares of Parent Common Stock during such twenty (20) trading day period.

“Indemnification Hold-Back Value” means $11,899,950.
“Indemnified Person” means a Parent Indemnified Person or a Holder Indemnified Person, as applicable.

“Indemnifying Party” means Parent or the Holders (including, where applicable, Holders’ Representative on behalf of the Holders, except for provisions relating to an obligation to make or a right to receive any payments), as applicable.

“Information Privacy and Security Laws” means all applicable Laws concerning the privacy and/or security of Personal Data (including, for the avoidance of doubt, any Laws of jurisdictions where the Personal Data was collected to the extent such laws are applicable to the Company Group) and all regulations promulgated thereunder, including, where applicable, HIPAA, state data privacy and breach notification Laws, state social security number protection Laws, any applicable Laws concerning requirements for website and mobile application privacy policies and practices, data or web scraping, call or electronic monitoring or recording or any outbound communications (including, outbound calling and text messaging, telemarketing, and e-mail marketing) the European Union Directive 95/46/EC, the European Union General Data Protection Regulation (GDPR), the Federal Trade Commission Act, the Gramm Leach Bliley Act, the Fair Credit Reporting Act, the Fair and Accurate Credit Transaction Act, the CAN-SPAM Act, the Telephone Consumer Protection Act, the Children’s Online Privacy Protection Act, and state consumer protection Laws; in each case, solely to the extent applicable to the Company Group.

“Information Statement” shall mean an information statement prepared by the Company for the purpose of soliciting (i) written consents of the Holders in favor of the adoption of this Agreement and the approval of the Transactions (including the Mergers) and (ii) Written Consent and Joinder Agreements from Holders. Without limitation, the Information Statement shall include such information as shall be appropriate to ensure that the issuance of Parent Common Stock as contemplated by this Agreement qualifies for the exemption from registration under the Securities Act pursuant to Rule 506 of Regulation D thereunder with the assumption that one or more Holders do not qualify as “accredited investors” as defined in Rule 501 of such Regulation D.

“Information System” means software, hardware, computer and telecommunications equipment and other information technology and related services.

“Intellectual Property Rights” means all intellectual property rights of every kind and nature however denominated, throughout the world, including: (i) patents, industrial designs, copyrights, mask work rights, trade secrets, database rights and all other proprietary rights in Technology; (ii) trademarks, trade names, service marks, service names, brands, trade dress, logos and other indicia of origin and the goodwill associated therewith; (iii) domain names, rights of privacy and publicity and moral rights; (iv) any and all registrations, applications, recordings, licenses, common-law rights and contractual rights relating to any of the foregoing; (v) all Actions and rights to sue at law or in equity for any past or future infringement or other impairment of any of the foregoing, including the right to receive all proceeds and damages therefrom; and (vi) all rights to obtain renewals, continuations, divisions, or other extensions of legal protections pertaining thereto.

“Intentional Fraud” means the willful and knowing commission of fraud with the specific intent to deceive and mislead.
“IRS” means the United States Internal Revenue Service.

“Knowledge” means (i) with respect to any individual, the actual knowledge following reasonable inquiry of the specified individual, and (ii) with respect to any entity, the actual knowledge of the executive officers of such entity following reasonable inquiry; provided, however, the terms “Knowledge of the Company” or “to the Company’s Knowledge” each mean the actual knowledge following reasonable inquiry of Cesar Elizaga, Kristine Ashcraft, Dave Colaizzi and Mike Issac.

“Law” means any United States federal, state or local or any foreign law, statute, ordinance, code, rule or regulation, resolution or promulgation, agency guidance or similar legal requirement or any Order or any Permit granted under any of the foregoing or any similar provision having the force or effect of law and includes Health Care Laws and Information Privacy and Security Laws.

“Liability” means, with respect to any Person, any liability or obligation of such Person whether known or unknown, whether asserted or not asserted, whether determined, determinable or otherwise, whether absolute or contingent, whether accrued or unaccrued, whether liquidated or unliquidated, whether directly incurred or consequential, whether due or to become due and whether or not required under GAAP to be accrued on the financial statements of such Person.

“Lien” means any charge, encumbrance, claim, community or other marital property interest, equitable ownership interest, collateral assignment, lien (statutory or otherwise), license, option, pledge, security interest, mortgage, deed of trust, attachment, right of way, easement, restriction, encroachment, servitude, right of first offer or first refusal, buy/sell agreement and any other restriction or covenant with respect to, or condition governing the use, construction, voting (in the case of any equity interest), transfer, receipt of income or exercise of any other attribute of ownership of any kind or nature whatsoever affecting or attached to any asset.

“Loss” means, with respect to any Person, any cost, damage (including incidental and consequential damages as well as any diminution in value, including as to shares of capital stock, in each case only to the extent such damages or diminution in value are a reasonably foreseeable result of the event or facts that gave rise thereto for which indemnification is sought under this Agreement), expense, liability, loss, injury, deficiency and Tax, including interest, penalties, fees, fines, reasonable out-of-pocket legal, accounting and other professional fees and reasonable out-of-pocket expenses incurred in the investigation, collection, prosecution, determination, defense and settlement of such Losses (including, in each case, in connection with the enforcement of any claim for indemnification hereunder), that is incurred or suffered by such Person; provided, that “Losses” shall not include punitive or exemplary damages (unless such punitive or exemplary damages are actually awarded in connection with a Third Party Claim).

“Material Adverse Effect” means with respect to the Company Group (taken as a whole) or Parent, as applicable, any fact, condition, event, occurrence, change, circumstance or effect that, individually or in the aggregate with all other facts, conditions, changes, circumstances and effects with respect to which such defined term is used in this Agreement, (i) has had, or would reasonably be expected to have, a material adverse effect on the business, assets, operations, results of operations or financial condition of such Party, or (ii) has materially and adversely impaired, or would
reasonably be expected to materially and adversely impair, such Party’s ability to perform its obligations under the Transaction Agreements to which it is a party without material delay, or to consummate the Transactions under such Transaction Agreements; provided, however, that any determination of whether there has been a Material Adverse Effect shall not include any adverse effect, change, event, occurrence or state of facts (whether short term or long term): (a) that generally affects the industry in which a member of the Company Group or Parent, as applicable, operates so long as such Party is not disproportionately affected thereby relative to other participants in such industry; (b) that results from general economic or political conditions in any country where such Party’s business is conducted so long as such Party is not disproportionately affected relative to the other companies therein; (c) arising out of or attributable to any changes in financial, banking or securities markets in general, including any disruption thereof and any decline in the price of any security or any market index or any change in prevailing interest rates; (d) arising out of or attributable to any acts of war (whether or not declared), armed hostilities, military action, terrorism, epidemics, pandemics, or the escalation or worsening thereof; (e) consisting of any changes in applicable Laws, regulations, rules, orders, or other binding directives issued by any Governmental Authority, or accounting rules (including GAAP) or the enforcement, implementation or interpretation thereof; (f) consisting of any natural or man-made disaster or acts of God; (g) consisting of any failure by such Party to meet any internal or published projections, forecasts or revenue or earnings predictions (provided that the underlying causes of such failures (subject to the other provisions of this definition) shall not be excluded); or (h) that results from the taking or announcement of any action (or inaction) specifically contemplated or required to be taken by this Agreement, including the announcement or consummation of the Transactions.

“Merger Consideration Share Price” means the volume weighted average trading price for shares of Parent Common Stock on the New York Stock Exchange (or any other exchange which is then the primary exchange upon which shares of Parent Common Stock are traded) for the twenty (20) trading day period immediately preceding the Agreement Date, as adjusted by any stock split, division or subdivision of shares, stock dividend, reverse stock split, consolidation of shares, reclassification, recapitalization or other similar transaction with respect to shares of Parent Common Stock during such twenty (20) trading day period.

“Net Working Capital Threshold” means $0.

“Nonqualified Deferred Compensation Plan” has the meaning given such term in Section 409A(d)(1) of the Code.

“Note Conversion” means any conversion of the Company Notes into Company Stock in lieu of cash.

“Order” means any order, injunction (whether temporary, preliminary or permanent), judgment, decree, assessment, award or ruling enacted, promulgated, issued, entered, amended or enforced by any Governmental Authority.

“Ordinary Course of Business” means the ordinary course of business of the Company Group consistent with past practice.

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“Parent Common Stock” means shares of Parent’s common stock, par value $0.0001 per share, or any other shares of capital stock into which such common stock may be reclassified, converted or exchanged.

“Parent Fundamental Representations” means the representations and warranties contained in Section 4.1 (Organization), Section 4.2(a) (Authority) and Section 4.5 (Shares of Common Stock).

“Parent Indemnified Person” means each of Genelex India (following the Closing), Parent, Merger Sub A, Merger Sub B (a/k/a the Surviving Company, as successor to all assets and liabilities of the Company) and their respective Affiliates and each of the respective directors, officers, employees, agents, successors and assigns of each of the foregoing Persons.

“Parent Material Adverse Effect” means a Material Adverse Effect with respect to Parent.

“Per Share Aggregate Upfront Consideration” means the quotient of (i) the sum of (x) the Upfront Purchase Price, minus (y) the Indemnification Hold-Back Value, minus (z) the Expense Fund Amount, divided by (ii) the Fully Diluted Shares of Company Stock.

“Per Share Upfront Cash Consideration” means the quotient of (i) the sum of (v) the Base Cash Amount, minus (w) the Aggregate Option Payment, minus (x) the Substitute Cash Payment Amount, minus (y) the Indemnification Hold-Back Cash Amount, minus (z) the Expense Fund Amount, divided by (ii) the number of Consenting Shares held by Holders that are Accredited Investors (assuming, for this purpose, (a) acceleration of all vesting periods applicable to the Company Options, and (b) conversion of the Company Notes into Company Stock in lieu of cash).

“Per Share Upfront Stock Consideration” means the quotient of (i) the sum of (x) the Stock Consideration Shares, minus (y) the Indemnification Hold-Back Shares, divided by (ii) the number of Consenting Shares held by Holders that are Accredited Investors (assuming, for this purpose, (x) acceleration of all vesting periods applicable to the Company Options, and (y) conversion of the Company Notes into Company Stock in lieu of cash).

“Permit” means any permit, license, franchise, certificate, accreditation approval, registration, notification or authorization from any Governmental Authority, or required by any Governmental Authority to be obtained, maintained or filed.

“Permitted Liens” means: (i) statutory liens with respect to the payment of Taxes, in all cases which are not yet due or payable or that are being contested in good faith by appropriate actions and for which appropriate reserves with respect thereto have been established on the books and records of the Company Group to the extent required in accordance with GAAP; (ii) statutory liens of landlords, suppliers, mechanics, carriers, materialmen, warehousemen, service providers or workmen and other similar Liens imposed by Law created in the Ordinary Course of Business the existence of which would not constitute a default or breach under any of the Company Group’s Contracts for amounts that are not yet delinquent and are not, individually or in the aggregate significant; (iii) building, zoning, entitlement and other land use regulations imposed by any Governmental Authority with jurisdiction over the Leased Real Property which are not violated by the current use or occupancy of such Leased Real Property; (iv) easements, conditions, covenants
and restrictions that are of record with respect to the Leased Real Property which are not violated by the current use or occupancy of such Leased Real Property or the operation of the Company Group’s business or that do not and shall not adversely affect the value, or impair the use or current occupancy of the Leased Real Property and (v) non-exclusive and non-material licenses and contractual restrictions to, in or under any Intellectual Property Rights granted by any member of the Company Group to a third party in the Ordinary Course of Business.

“Person” means any natural person, corporation, limited liability company, partnership, association, trust or other entity, including a Governmental Authority. For clarity, where used in relation to the Company Group (or any member thereof), “Person” refers to third parties and does not refer to another member of the Company Group.

“Personal Data” means, as applicable, (i) any and all information about an individual that either contains data elements that identify the individual or with respect to which there is a reasonable basis to believe the information can be used to identify the individual, (ii) any information that enables a Person to contact the individual (such as an individual identifier contained in a cookie or an electronic device fingerprint) and (iii) any and all other information, the collection, use, sharing, transfer or other processing of which is regulated by any applicable Law in relation to data protection, data privacy or personal privacy, including personal healthcare information. Personal Data includes (v) personal identifiers such as name, address, Social Security Number, date of birth, driver’s license number or state identification number, Taxpayer Identification Number and passport number, (w) personal financial information, including credit or debit card numbers, account numbers, access codes, consumer report information and insurance policy number, (x) demographic information, (y) unique biometric data, such as fingerprint, retina or iris image, voice print or other unique physical representation and (z) individual medical or health information that is or can reasonably be tied to an identified or reasonably identifiable individual (including information of patients, customers, employees, workers, and individual contractors, to the extent that it satisfies the foregoing definition).

“Personal Data Obligations” means the Company Group’s privacy policies (or applicable terms of use) as published on any Company Group websites or mobile applications or any other privacy policies (or applicable terms of use), Contracts, or promises or representations agreed to with employees, consumers or customers, or other Persons, and any applicable Laws, regarding Collection and Use of Personal Data, including but not limited to Laws regarding the use of Personal Data for marketing communications such as the CAN SPAM Act of 2003.

“Pre-Closing Tax Period” means (i) any taxable period ending on or before the Closing Date and (ii) with respect to any Straddle Tax Period, the portion thereof ending on and including the Closing Date.

“Pre-Closing Taxes” means, without duplication, any liability for Taxes (1) of any member of the Company Group with respect to any Pre-Closing Tax Period, but only to the extent that such Taxes were not included in the computation of the Closing Net Working Capital or otherwise in the calculation of the Final Purchase Price and do not result from any action taken on the Closing Date after the Closing by the Parent or any of its Affiliates with respect to the Company Group (other than in the Ordinary Course of Business); (2) of any Person other than a member of the Company
Group, the Parent or any of its Affiliates in respect of any Pre-Closing Tax Period for which the Company Group is liable as a result of being or having been a member of an affiliated, consolidated, combined or unitary group, including pursuant to Treasury Regulations Section 1.1502-6, prior to the Closing; (3) of any Person with respect to a Pre-Closing Tax Period imposed on any member of the Company Group as a transferee or successor, by contract or pursuant to applicable Law, relating to any event of transaction occurring prior to the Closing, and (4) imposed for any taxable year that includes the Closing Date as a result of any inclusion under Section 951(a) or 951A of the Code (or any similar provision of any state or local tax law) of income of Genelex India attributable to any Pre-Closing Tax Period; provided, however, that the aggregate amount of inclusions under Section 951 and Section 951A of the Code pursuant to this clause (4) shall not exceed the aggregate amount of inclusions with respect to the entire taxable year of Genelex India. The amount of Pre-Closing Taxes and taxable income in respect of a Straddle Tax Period shall be determined based on an interim closing of the books as of the close of business on the Closing Date (including the determination of any inclusions under Section 951 or 951A of the Code or any creditable foreign taxes deemed to be accrued), except that any Taxes (such as ad valorem Taxes), allowances (such as depreciation) or other Tax items that are determined on a time basis shall be pro-rated on a per diem basis.

“Premises” means any building, plant, improvement or structure located on the Leased Real Property.

“Pro Rata Portion” means, with respect to any Consenting Holder, the portion of the Final Purchase Price allocated to such Consenting Holder pursuant to the terms of this Agreement relative to the Final Purchase Price allocated to all Consenting Holders (expressed as a percentage, rounded to four decimal places, and as set forth in the Allocation Schedule).

“Products and Services” means any product or service that any member of the Company Group currently offers or sells.

“Proprietary Software” means any Software that is owned by any member of the Company Group and is used in connection with the Company Group’s Business as presently conducted by the Company Group.

“Public Software” means any software that is (i) distributed as free software or as open source software (e.g., Linux), (ii) subject to any licensing or distribution model that includes as a term thereof any requirement for distribution of source code to licensees or third parties, patent license requirements on distribution, restrictions on future patent licensing terms, or other abridgement or restriction of the exercise or enforcement of any Company Intellectual Property Rights through any means, (iii) licensed or distributed under any Public Software License or under less restrictive free or open source licensing and distribution models such as those obtained under the BSD, MIT, Boost Software License and the Beer-Ware Public Software Licenses or any similar licenses, (iv) a public domain dedication or (v) derived in any manner (in whole or in part) from, links to, relies on, is distributed with, incorporates or contains any software described in (i) through (iv) above.
“Public Software License” means any of the following licenses or distribution models, or licenses or distribution models similar to any of the following: (i) GNU’s General Public License (GPL) or Lesser/Library GPL (LGPL); (ii) the Artistic License (e.g., PERL); (iii) the Mozilla Public License; (iv) the Netscape Public License; (v) the Sun Community Source License (SCSL); (vi) the Sun Industry Standards License (SISL); (vii) the Apache License; and (viii) any licenses that are defined as OSI (Open Source Initiative) licenses as listed on the Opensource.org website.

“Reference Date” means April 26, 2016.

“Related Party” means (i) any current or former director (or nominee), or officer of any member of the Company Group, (ii) any five percent (5%) or greater Company Stockholder on a fully-diluted basis and (iii) any relative, spouse, officer, director or Affiliate of any of the foregoing Persons.

“Release” means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, disposing of or migrating into or through the environment or any natural or man-made structure.

“Representatives” means, with respect to any Person, the officers, employees, investment bankers, financial advisors, attorneys, accountants, agents and other representatives of such Person.

“SEC” means the United States Securities and Exchange Commission.

“Securities Act” means the Securities Act of 1933, as amended.

“Software” means computer software programs and software systems, including all databases, compilations, tool sets, compilers, higher level or “proprietary” languages, related documentation and materials (including all Source Code Materials), whether in source code, object code or human readable form, and all software programs and software systems that are classified as work-in-progress on the Closing Date.

“Source Code Materials” as it pertains to source code of any Software means: (i) the software, tools and materials utilized for the operation, development and maintenance of the Software; (ii) documentation describing the names, vendors and version numbers of (x) the development tools used to maintain or develop the Software and (y) any third-party software or other applications that form part of the source code version of the Software and are required in order to compile, assemble, translate, bind and load the Software into executable releases; (iii) all programmers’ notes, bug lists and technical information, systems and user manuals and documentation for the Software, including all job control language statements, descriptions of data structures, flow charts, technical specifications, schematics, statements or principles of operations, architecture standards and annotations describing the operation of the Software; and (iv) all test data, test cases and test automation scripts used for the testing and validating the functioning of the Software.

“Stock Consideration Shares” means a number of shares of Parent Common Stock equal to the quotient of (i) the Stock Consideration Value, divided by (ii) the Merger Consideration Share Price.
“Stock Consideration Value” means the sum of (i) the Upfront Purchase Price, minus (ii) the Base Cash Amount minus (iii) the Aggregate Exercise Amount.

“Straddle Tax Period” means any taxable period including but ending after the Closing Date.

“Subsidiary” means, with respect to a Party, any corporation, limited liability company, partnership, association, trust or other entity the accounts of which would be consolidated with those of such Party in such entity’s consolidated financial statements if such financial statements were prepared in accordance with GAAP, as well as any other corporation, limited liability company, partnership, association, trust or other entity of which securities or other ownership interests representing more than 50% of the equity or more than 50% of the ordinary voting power (or, in the case of a partnership, more than 50% of the general partnership interests) are, as of such date, owned by such Party or one or more Subsidiaries of such Party.

“Substitute Cash Payment Amount” means the aggregate amount payable, if any, to the Holders pursuant to Sections 2.6(c)(ii)(A) and 2.6(c)(iii)(A).

“Tax” or “Taxes” means (i) any or all federal, state, local or foreign taxes or other assessments in the nature of taxes imposed by a Taxing Authority, including all net income, gross receipts, capital, sales, use, ad valorem, value added, transfer, franchise, profits, inventory, capital stock, withholding, payroll, employment, social security, unemployment, excise, severance, stamp, occupation, property and estimated taxes, and (ii) any or all interest, penalties or additions to tax imposed by any Taxing Authority in connection with any item described in clause (i).

“Tax Returns” means, with respect to Taxes, any return, report, claim for refund, estimate, information return or statement, declaration of estimated Tax or other similar document filed or required to be filed with any Taxing Authority with respect to Taxes, including any schedule or attachment thereto and including any amendment thereof.

“Tax Sharing Agreement” means any agreement relating to the sharing, allocation or indemnification of Taxes or amounts in lieu of Taxes, or any similar Contract or arrangement, other than any Contract or arrangement entered into in the Ordinary Course of Business the purpose of which is not primarily related to Taxes.

“Taxing Authority” means any Governmental Authority responsible for the administration, assessment and collection of any Taxes.

“Technology” means all inventions, works, discoveries, innovations, know-how, information (including ideas, research and development, formulas, algorithms, compositions, processes and techniques, data, designs, drawings, specifications, customer and supplier lists, pricing and cost information, business and marketing plans and proposals, graphics, illustrations, artwork, documentation and manuals), databases, computer software, firmware, computer hardware, integrated circuits and integrated circuit masks, electronic, electrical and mechanical equipment and all other forms of technology, including improvements, modifications, works in process, derivatives, or changes, whether tangible or intangible, embodied in any form, and all documents and other materials recording any of the foregoing.
“Third Party Claim” refers to any Action that is instituted, or any claim that is asserted, by any Person not a Party to this Agreement in respect of an indemnifiable matter under this Agreement.

“Transaction Agreements” means this Agreement, the Registration Rights Agreement, the Written Consent and Joinder Agreements and the Support Agreements.

“Transactions” means any transaction or arrangement contemplated by this Agreement, including (i) the Mergers and the other transactions and arrangements described in the recitals to this Agreement, (ii) the execution, delivery and performance of the Transaction Agreements other than this Agreement and (iii) the payment of fees and expenses relating to such transactions by the Company Group and the Holders.

“Unpaid Transaction Expenses” means Company Transaction and Bonus Expenses to the extent that they have not been paid on or prior to the close of business on the day immediately preceding the Closing Date.

“Upfront Purchase Price” means the sum of (i) the Base Purchase Price, minus (ii) the estimated Company Debt, minus (iii) the amount, if any, by which the Net Working Capital Threshold exceeds the estimated Closing Net Working Capital, plus (iv) the amount, if any, by which the Closing Net Working Capital exceeds the Net Working Capital Threshold, plus (v) the aggregate amount of Closing Cash, less (vi) the Unpaid Transaction Expenses plus (vii) the Aggregate Exercise Amount.

Terms Defined Elsewhere in this Agreement.

For purposes of this Agreement, the following terms have meanings set forth at the section of this Agreement indicated opposite such term:

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ARTICLE II

THE CONTEMPLATED TRANSACTIONS

2.1 The Mergers. Upon the terms and subject to the conditions set forth in this Agreement and in accordance with the DGCL, at the Closing, the Parties (other than the Holders’ Representative) shall cause the Reverse Merger to be consummated by filing with the Secretary of State of the State of Delaware a certificate of merger in the form attached hereto as Exhibit C (the “Certificate of Reverse Merger”), executed in accordance with the relevant provisions of the DGCL, and shall make all other filings or recordings required under the DGCL in order to consummate the Reverse Merger. The Reverse Merger shall become effective at the time the Certificate of Reverse Merger is filed with the Secretary of State of the State of Delaware (the “Effective Time”). At the Effective
Time, Merger Sub A shall be merged with and into the Company, and the separate corporate existence of Merger Sub A shall thereupon cease, and the Company shall continue as the surviving corporation and a wholly owned Subsidiary of Parent. Promptly after the Closing, and in all cases on the Closing Date, Parent shall cause the Forward Merger to be consummated by filing with the Secretary of State of the State of Delaware a certificate of merger in the form attached hereto as Exhibit D (the “Certificate of Forward Merger” and, together with the Certificate of Reverse Merger, the “Certificates of Merger”), executed in accordance with the relevant provisions of the DGCL and the DLLCA, as applicable, and shall make all other filings or recordings required under the DGCL and the DLLCA, as applicable in order to consummate the Forward Merger. The Forward Merger shall become effective at the time the Certificate of Forward Merger is filed with the Secretary of State of the State of Delaware. At the effective time of the Forward Merger, Parent shall cause the Company to merge with and into Merger Sub B in accordance with the DLLCA, whereupon the separate existence of the Company shall cease, and Merger Sub B will be the Surviving Company. The surviving company after the Forward Merger is sometimes referred to hereinafter as the “Surviving Company.”

2.2 Closing. The closing of the Transactions (the “Closing”) shall take place at 10:00 a.m. (San Francisco time) on the later of (i) the second Business Day following the satisfaction or waiver of the conditions set forth in ARTICLE VI (other than those conditions that by their nature are to be satisfied at the Closing, but subject to the satisfaction or waiver of those conditions at such time) and (ii) April 1, 2020, at the offices of Pillsbury Winthrop Shaw Pittman LLP, 12255 El Camino Real, Suite 300, San Diego, California 92130, unless another time, date or place is agreed to in writing by the Parties (other than the Holders’ Representative) (the “Closing Date”).

2.3 Effects of the Mergers. The Mergers shall have the effects set forth in this Agreement, the DGCL and the DLLCA. Without limiting the generality of the foregoing and subject thereto, as a result of the Mergers, (i) all the rights, privileges and powers of the Company, Merger Sub A and Merger Sub B shall vest in the Surviving Company, (ii) all of the property, real and personal, including causes of action and every other asset of the Company, Merger Sub A and Merger Sub B, shall vest in the Surviving Company without further act or deed and (iii) all debts, liabilities and duties of the Company, Merger Sub A and Merger Sub B shall become the debts, liabilities and duties of the Surviving Company.

2.4 Organization Documents of the Surviving Company.

(a) Certificate of Incorporation and Operating Agreement. At the Effective Time, the certificate of incorporation of the Company shall be amended and restated so as to be identical to the certificate of incorporation of Merger Sub A as in effect immediately prior to the Effective Time, except that the name of the surviving corporation in the Reverse Merger shall be the name of the Company as of immediately prior to the Effective Time. At the effective time of the Forward Merger, the limited liability company operating agreement of Merger Sub B shall be (i) amended and restated so as to be substantively identical to the certificate of incorporation of Merger Sub A as in effect immediately prior to the effective time of the Forward Merger, except that the name of the Surviving Company shall be the name of Merger Sub A as of immediately prior to the effective time of the Forward Merger (i.e., the name of the Company as of immediately prior
to the Effective Time), and (ii) the limited liability company operating agreement of the Surviving Company until thereafter amended as provided therein or by applicable Law.

(b) **Bylaws.** At the Effective Time, the bylaws of the Company shall be amended and restated so as to be identical to the bylaws of Merger Sub A as in effect immediately prior to the Effective Time.

2.5 **Management of the Surviving Company.**

(a) **Board of Directors.** Unless otherwise determined by Parent prior to the Effective Time, the Parties (other than the Holders’ Representative) shall take all requisite action so that the directors of Merger Sub B immediately prior to the Effective Time shall be the directors of the Surviving Company immediately following the effectiveness of both Mergers, until their respective successors are duly elected and qualified or their earlier death, resignation or removal in accordance with the Charter Documents of the Surviving Company.

(b) **Officers.** Unless otherwise determined by Parent prior to the Effective Time, the Parties (other than the Holders’ Representative) shall take all requisite action so that the officers of Merger Sub B immediately prior to the Effective Time shall be the officers of the Surviving Company until their respective successors are duly appointed and qualified or their earlier death, resignation or removal in accordance with the Charter Documents of the Surviving Company.

2.6 **Effect of the Reverse Merger on Capital Stock.** At the Effective Time, by virtue of the Reverse Merger and without any action to be taken on the part of the holder of any shares of the Company Stock or any shares of capital stock of Merger Sub A, or on the part of the Company, Parent, Merger Sub A or any other Person, the following shall occur:

(a) **Capital Stock of Merger Sub A.** Each share of capital stock of Merger Sub A issued and outstanding immediately prior to the Effective Time shall be converted into and become one validly issued, fully paid and non-assessable share of common stock, par value $0.0001 per share, of the Company and collectively shall constitute the only outstanding shares of capital stock of the Company and each stock certificate of Merger Sub A evidencing ownership of any such shares shall evidence ownership of such shares of common stock of the Company.

(b) **Cancellation of Securities Held by the Company.** Any shares of Company Stock that are owned by the Company immediately prior to the Effective Time shall be automatically canceled and shall cease to exist and no consideration shall be delivered in exchange therefor.

(c) **Conversion of Company Stock.**

(i) **Accredited Consenting Holders.** Each share of Company Stock that is (x) issued and outstanding (including as a result of the Note Conversion) immediately prior to the Effective Time (other than shares to be canceled in accordance with Section 2.6(b)) and (y) held by a Consenting Holder that qualifies as an Accredited Investor, shall, subject to the terms and
conditions of this Agreement, be converted into the right to receive (without interest) the following consideration, payable as set forth herein:

(A) within five (5) Business Days after the Closing Date, a certificate or book entry reflecting an amount of shares of Parent Common Stock equal to the Per Share Upfront Stock Consideration;

(B) on the Closing Date, an amount of cash equal to the Per Share Upfront Cash Consideration;

(C) an amount of cash equal to the quotient of (x) the amount of any Post-Closing Adjustment (to the extent payable in accordance with Section 2.18(c)(iii)), divided by (y) the Fully Diluted Shares of Company Stock;

(D) a certificate or book entry reflecting up to an amount of shares of Parent Common Stock equal to the quotient of (x) the Indemnification Hold-Back Shares, to the extent released to the Holders as provided herein, divided by (y) the Consenting Shares held by Holders that are Accredited Investors (assuming, for this purpose, (x) acceleration of all vesting periods applicable to the Company Options, and (y) conversion of the Company Notes into Company Stock in lieu of cash); and

(E) an amount of cash equal to up to the quotient of (x) the Expense Fund Amount, to the extent released to the Holders as provided herein, divided by (y) the Fully Diluted Shares of Company Stock.

(ii) Non-Accredited Consenting Holders. Each share of Company Stock that is (x) issued and outstanding (including as a result of the Note Conversion) immediately prior to the Effective Time (other than shares to be canceled in accordance with Section 2.6(b)) and (y) held by a Consenting Holder that does not qualify as an Accredited Investor, shall, subject to the terms and conditions of this Agreement (including Section 2.6(c)(iii) below), be converted into the right to receive (without interest) the following consideration, payable as set forth herein:

(A) on the Closing Date, an amount of cash equal to the Per Share Aggregate Upfront Consideration;

(B) an amount of cash equal to the quotient of (x) the amount of any Post-Closing Adjustment (to the extent payable in accordance with Section 2.18(c)(iii)), divided by (y) the Fully Diluted Shares of Company Stock;

(C) an amount of cash equal to up to the quotient of (x) the Indemnification Hold-Back Cash Amount, to the extent released to the Holders as provided herein, divided by (y) the sum of (i) the Fully Diluted Shares of Company Stock minus (ii) the Consenting Shares held by Holders that are Accredited Investors (assuming, for this purpose, (x) acceleration of all vesting periods applicable to the Company Options, and (y) conversion of the Company Notes into Company Stock in lieu of cash); and
(D) an amount of cash equal to up to the quotient of (x) the Expense Fund Amount, to the extent released to the Holders as provided herein, divided by (y) the Fully Diluted Shares of Company Stock.

(i) Other Holders. Notwithstanding the provisions of Sections 2.6(c)(i) and 2.6(c)(ii), to the extent that any share of Company Stock issued and outstanding (including as a result of the Note Conversion) immediately prior to the Effective Time (other than shares to be canceled in accordance with Section 2.6(b)) is held by a Holder that is not a Consenting Holder, then such share shall, subject to the terms and conditions of this Agreement, be converted into the right to receive (without interest) the following consideration, payable as set forth herein:

(A) on the Closing Date, an amount of cash equal to the Per Share Aggregate Upfront Consideration;

(B) an amount of cash equal to the quotient of (x) the amount of any Post-Closing Adjustment (to the extent payable in accordance with Section 2.18(c)(iii)), divided by (y) the Fully Diluted Shares of Company Stock;

(C) an amount of cash equal to up to the quotient of (x) the Indemnification Hold-Back Cash Amount, to the extent released to the Holders as provided herein, divided by (y) the sum of (i) the Fully Diluted Shares of Company Stock minus (ii) the Consenting Shares held by Holders that are Accredited Investors (assuming, for this purpose, (x) acceleration of all vesting periods applicable to the Company Options, and (y) conversion of the Company Notes into Company Stock in lieu of cash); and

(D) an amount of cash equal to up to the quotient of (x) the Expense Fund Amount, to the extent released to the Holders as provided herein, divided by (y) the Fully Diluted Shares of Company Stock.

2.7 Options. It is acknowledged and agreed by all of the Parties that:

(a) At the Closing, each Company Option that is unexpired, unexercised and outstanding immediately prior to the Closing shall (i) become fully vested with respect to all shares exercisable thereunder, and (ii) be cancelled in exchange for the right to receive (without interest) the following consideration for each share of Company Stock issuable upon the exercise of such Company Option as of immediately prior to the Closing, payable as set forth herein:

(A) an amount of cash equal to the sum of (x) the Per Share Aggregate Upfront Consideration, minus (y) the exercise price per share of such Company Option;

(B) an amount of cash equal to the quotient of (x) the amount of any Post-Closing Adjustment (to the extent payable in accordance with Section 2.18(c)(iii)), divided by (y) the Fully Diluted Shares of Company Stock;

(C) an amount of cash equal to up to the quotient of (x) the Indemnification Hold-Back Cash Amount, to the extent released to the Holders as provided herein,
(D) an amount of cash equal to up to the quotient of (x) the Expense Fund Amount, to the extent released to the Holders as provided herein, divided by (y) the Fully Diluted Shares of Company Stock.

2.8 Rights Cease to Exist. As of the Effective Time, all shares of Company Stock, and all options, warrants and other securities convertible, exercisable or exchangeable for, or otherwise granting the right to acquire, Company Stock, shall no longer be outstanding, shall automatically be canceled and shall cease to exist and each holder of any shares of Company Stock shall cease to have any rights with respect thereto, except the rights set forth in this ARTICLE II.

2.9 No Fractional Shares; Offset Right. Notwithstanding any provision herein to the contrary (i) no fractional shares of Parent Common Stock shall be issued pursuant to this ARTICLE II (with the intended effect that any shares of Parent Common Stock issuable to a single Consenting Holder on a particular date shall be aggregated and then rounded up to the nearest whole number); (ii) in no event shall the total number of shares of Parent Common Stock issued hereunder exceed 19.9% of the total number of shares of Parent Common Stock outstanding immediately prior to the Closing (not including any shares of Parent Common Stock that are owned by Parent and without assuming the conversion or exercise of any options, warrants or other convertible securities) if Parent has not first obtained the required stockholder approval of the issuance of such number of shares of Parent Common Stock pursuant to applicable stock exchange listing rules (with Parent agreeing to exercise good faith efforts to obtain such required stockholder approval if the 19.9% cap will have any effect with respect to any issuance of Parent Common Stock pursuant to this Agreement); (iii) if, when cash and Indemnification Hold-Back Shares would otherwise be distributed or payable pursuant to Section 2.6(c)(i)(D), Section 2.6(c)(ii)(C), Section 2.6(c)(iii)(C) and Section 2.7(a)(C), as applicable, there shall exist a good faith claim by Parent to exercise the Offset Right, all or a portion of such cash and Indemnification Hold-Back Shares (with such shares valued at the Indemnification Hold-Back Shares Value) as determined by Parent (in its reasonable discretion, but subject to the limitations set forth in ARTICLE VIII) to represent the Losses at issue (including, if applicable, as to any specific Holders) shall be withheld from payment until such time as the claim has been perfected, in which case the Offset Right shall apply (subject to the limitations set forth in ARTICLE VIII) against such portion of the shares and cash at issue and the balance of any withheld portion (if applicable) shall be distributed to the Holders (or, as applicable, to the affected Holders) as contemplated by this Agreement; and (iv) no Holder may assign or transfer any right to receive shares of Parent Common Stock or cash pursuant to this Agreement other than by testamentary will or the applicable Laws of intestacy without the prior written consent of Parent (which may be withheld in Parent’s sole discretion).

2.10 Delivery of Calculations. Not less than two (2) Business Days prior to the Closing Date, the Company shall prepare and deliver to Parent the following for Parent’s review and approval:
(a) the Company’s calculation of the Upfront Purchase Price, setting forth, in reasonable detail, an estimation of each component thereof;

(b) the Company’s calculations (setting forth the individual components) of (i) the Aggregate Option Payment, (ii) the Substitute Cash Payment Amount, (iii) the Stock Consideration Value, (iv) the Stock Consideration Shares, (v) the Per Share Upfront Cash Consideration, (vi) the Per Share Upfront Stock Consideration, (vii) the Per Share Aggregate Upfront Consideration and (viii) the Aggregate Exercise Amount;

(c) the Company’s calculations of (i) the Fully Diluted Shares of Company Stock, (ii) the aggregate number of Consenting Shares held by Holders that are Accredited Investors, and (iii) the aggregate number of Consenting Shares held by Holders that are not Accredited Investors;

(d) a schedule of all Company Options, with exercise price information for each Company Option;

(e) the Company’s estimated balance sheet as of immediately prior to the Closing (the “Estimated Balance Sheet”), with separate schedules reflecting (i) the estimated Closing Cash, (ii) the estimated Company Debt, (iii) the estimated Unpaid Transaction Expenses and (iv) the estimated Closing Net Working Capital as well as the delta between the estimated Closing Net Working Capital and the Net Working Capital Threshold;

(f) the name, address (and email address) and, if known, tax identification number of each Holder and:

(i) for the Consenting Holders, the amount of Parent Common Stock to be issued to each Consenting Holder, if any, pursuant to Section 2.6(c)(i)(A), the amount of cash to be paid to each Consenting Holder pursuant to Section 2.6(c)(i)(B) or Section 2.6(c)(ii)(A), as applicable, as well as the potential cash payable and potential Parent Common Stock issuable, if any, to each such Consenting Holder pursuant to Sections 2.6(c)(i)(C) through 2.6(c)(ii)(E) or Sections 2.6(c)(ii)(B) through 2.6(c)(ii)(D), as applicable;

(ii) for any Holders that are not Consenting Holders, the amount of cash to be paid to each Holder pursuant to Section 2.6(c)(iii)(A), as well as the potential cash payable each such Holder pursuant to Sections 2.6(c)(iii)(B) through 2.6(c)(iii)(D), as applicable;

(iii) in the instance of Company Optionholders, the amount of cash to be paid to each Company Optionholder pursuant to Section 2.7(a)(A) as well as the potential cash payable to each Company Optionholder pursuant to Sections 2.7(a)(B) through 2.7(a)(C); and

(g) the Company’s determination of whether Taxes are required to be withheld from any payments to each Holder under this Agreement (assuming submission of a Form W-9 or Form W-8, as applicable); and
(h) a certificate of a duly authorized officer of the Company certifying the foregoing on behalf of the Company.

The calculations listed in the foregoing Section 2.10(a) through 2.10(g) shall be set forth on a spreadsheet referred to herein as the “Allocation Schedule.” The Parties agree that Parent, Merger Sub A, Merger Sub B and the Surviving Company will have the right to rely on the Allocation Schedule as setting forth a true, complete and accurate listing of all amounts due to be paid by Parent, Merger Sub A, Merger Sub B and the Company to the Holders in exchange for Company Stock. Parent, Merger Sub A, Merger Sub B and the Surviving Company will not have any liability with respect to the allocation of any shares of Parent Common Stock or cash made to the Holders in accordance with the Allocation Schedule. Notwithstanding anything in this Agreement to the contrary, the Estimated Balance Sheet and the Company’s estimation of the Closing Net Working Capital shall be consistent with the Accounting Methodology and shall reflect all vacation, sick leave, severance and/or other remuneration required by Law, Contract or policy of any member of the Company Group to be paid to Employees for periods on or prior to the Closing Date.

2.11 Payments At Closing. At the Closing, Parent shall make, or cause to be made, the following payments, by wire transfer of immediately available funds:

(a) to each holder of Closing Debt, the aggregate amount of Closing Debt owed to such holder pursuant to a payoff letter from such holder (i) indicating the amount required to discharge such Closing Debt in full (the “Payoff Amount”) and (ii) agreeing to release applicable Liens upon receipt of the applicable Payoff Amount;

(b) to the payees thereof, the Unpaid Transaction Expenses, in each case as directed in writing by the Company prior to the Closing pursuant to invoices or other evidence reasonably satisfactory to Parent, except that (i) Parent shall cause Change in Control Payments to Employees to be paid through the Surviving Company’s payroll system, and (ii) the Post-Closing Retention Bonuses shall be payable at the times set forth in the Contracts governing such payments;

(c) to the Exchange Agent, the aggregate cash for distribution to the Holders as of immediately following the Closing pursuant to Section 2.6(c)(i)(B), Section 2.6(c)(ii)(A) and Section 2.6(c)(iii)(A) and in accordance with the Allocation Schedule; and

(d) to the Holders’ Representative, the Expense Fund Amount.

Promptly following the Closing, Parent will pay directly, or through the Company’s payroll service as applicable (i.e., to Employees), the cash to be distributed to the Company Optionholders as of immediately following the Closing pursuant to Section 2.7(a)(A) and in accordance with the Allocation Schedule.

2.12 Issuances of Shares Following Closing. Within five (5) Business Days after the Closing Date, Parent shall deliver book entries reflecting the shares of Parent Common Stock to be allocated among the Consenting Holders that are Accredited Investors pursuant to Section 2.6(e)(i)(A) and in accordance with the Allocation Schedule; provided, however, that with respect to any shares of Company Stock for which a properly completed Letter of Transmittal has not been received
by the Exchange Agent, Parent shall be entitled to withhold the book entries reflecting the shares of Parent Common Stock issuable with respect to such shares of Company Stock and to issue such shares of Parent Common Stock promptly following such receipt by the Exchange Agent.

2.13 Non-Conversion.

(a) **Dissenting Shares.** Notwithstanding anything in this Agreement to the contrary, any Dissenting Shares shall not be converted into or represent a right to receive the applicable consideration for Company Stock set forth in Section 2.6, but instead the applicable Company Stockholder shall only be entitled to such rights as are provided by the DGCL. In the event that a Company Stockholder properly perfects such Company Stockholder’s appraisal, dissenters’ or similar rights by demanding and not effectively withdrawing or losing such Company Stockholder’s appraisal, dissenters’ or similar rights for any shares of Company Stock, the Exchange Agent shall deliver to Parent such Company Stockholder’s portion of any cash otherwise allocable to such Dissenting Shares at the time such rights are perfected.

(b) **Withdrawal or Loss of Rights.** Notwithstanding the provisions of Section 2.13(a), if any Company Stockholder effectively withdraws or loses (through failure to perfect or otherwise) such Company Stockholder’s appraisal or dissenters’ rights with respect to any Dissenting Shares under the DGCL, then, within ten (10) Business Days of the later of the Effective Time and the occurrence of such event, (i) such Company Stockholder’s shares shall automatically convert into and represent only the right to receive the consideration for Company Stock, as applicable, set forth in and subject to the provisions of this Agreement, upon delivery of a duly completed and validly executed Letter of Transmittal and (ii) Parent (to the extent the following amount has been previously delivered by the Exchange Agent to Parent pursuant to Section 2.13(a) and not returned to the Exchange Agent) or the Exchange Agent shall deliver to such Company Stockholder such Company Stockholder’s portion of the cash attributable to such shares.

(c) **Demands for Appraisal.** The Company shall give Parent (i) prompt notice of any written demand for appraisal received by the Company pursuant to the applicable provisions of the DGCL and (ii) the opportunity to participate in all negotiations and proceedings with respect to such demands. The Company shall not, except with the prior written consent of Parent (not to be unreasonably withheld, conditioned or delayed), make any payment with respect to any such demands or offer to settle or settle any such demands. Any communication to be made by the Company to any Company Stockholder with respect to such demands must be submitted and consented to in writing by Parent prior to delivery to any such Company Stockholder.

2.14 Exchange Agent; Exchange of Certificates; Submission of Letters of Transmittal.

(a) Wilmington Trust, National Association, will act as exchange agent hereunder (in such capacity, the “Exchange Agent”) for the delivery of the aggregate cash for distribution to the Holders as of immediately following the Closing pursuant to Section 2.6(c)(i)(B), Section 2.6(c)(ii)(A) and Section 2.6(c)(iii)(A) and in accordance with the Allocation Schedule as well as the cash that may become distributable to such Holders as and when any portion of the Indemnification Hold-Back Cash Amount or the Expense Fund Amount is released pursuant to the terms of this Agreement. At or prior to the Effective Time, Parent will deposit (or cause to be
deposited) with the Exchange Agent, for the benefit of the Holders, the aggregate cash for distribution to the Holders as of immediately following the Closing pursuant to Section 2.6(c)(i)(B), Section 2.6(c)(i)(A) and Section 2.6(c)(iii)(A). Parent also will deposit (or cause to be deposited) with the Exchange Agent, for the benefit of the Holders, cash that may become distributable to the Holders as and when any portion of the or the Indemnification Hold-Back Cash Amount is released pursuant to the terms of this Agreement. The Exchange Agent will hold and distribute the cash payable to the Holders pursuant to the provisions of an exchange agreement between Parent and the Exchange Agent (the “Exchange Agreement”).

(b) Following the Effective Time, Parent shall cause the Exchange Agent to send to each Company Stockholder of record (including Persons deemed to have acquired shares of Company Stock as a result of the Note Conversion) (i) a letter of transmittal in a form mutually agreed upon by Parent and the Company (each, a “Letter of Transmittal”) (which shall specify that delivery shall be effected and risk of loss and title to the Company Stock certificates, if applicable, shall pass, only upon receipt of such certificates by the Exchange Agent) and (ii) instructions for use in effecting the surrender of the Company Stock certificates, if applicable, in exchange for the right to receive the consideration, if any, provided for herein. Upon surrender by a holder of a Company Stock certificate for cancellation to the Exchange Agent, if applicable, and such Letter of Transmittal, duly completed and validly executed in accordance with the instructions (and such other customary documents as may reasonably be required by the Exchange Agent), the record owner of such Company Stock shall be entitled to receive in exchange therefor the consideration, if any, provided for herein and the Company Stock certificate so surrendered, if any, shall thereafter be canceled. If payment of any portion of the consideration provided for herein is to be made to any Person other than the Person in whose name the applicable shares of Company Stock are registered, it shall be a condition of payment that (1) the applicable Company Stock certificate surrendered, if any, be properly endorsed or otherwise be in proper form for transfer in accordance with this Section 2.14(b) and (2) the Person requesting such payment shall have paid any transfer and other Taxes required by reason of the payment of the applicable portion of the consideration provided for herein to a Person other than the registered holder of such Company Stock or shall have established to the reasonable satisfaction of Parent that such Tax either has been paid or is not applicable. After the Effective Time, each Company Stock certificate shall represent only the right to receive the applicable portion of the consideration provided for herein as contemplated by this ARTICLE II.

(c) Transfer Books; No Further Ownership Rights in Company Stock. The right to receive the applicable portion of the consideration provided for herein upon the surrender for exchange of shares of Company Stock in accordance with the terms of this ARTICLE II shall be deemed to have been paid in full satisfaction of all rights pertaining to such shares of Company Stock and at the close of business on the day on which the Effective Time occurs, the stock transfer books of the Company shall be closed and thereafter there shall be no further registration of transfers on the stock transfer books of the Surviving Company of the shares of Company Stock that were outstanding immediately prior to the Effective Time. If, at any time after the Effective Time, shares of Company Stock are presented to Parent or the Surviving Company for any reason, they shall be canceled and exchanged as provided in this ARTICLE II.
(d) **Lost, Stolen or Destroyed Certificates.** If any Company Stock certificate is lost, stolen or destroyed, upon the making of an affidavit of the fact by the Person claiming such Company Stock certificate to be lost, stolen or destroyed and, if required by the Exchange Agent and Parent, the making of an indemnity against any claim that may be made with respect to such certificate, the Exchange Agent shall pay or Parent shall issue, as applicable, in exchange for such lost, stolen or destroyed certificate, the applicable portion of the cash consideration or the shares of Parent Common Stock to be paid or issued in respect of the shares of Company Stock formerly represented by such certificate, as contemplated by this ARTICLE II.

(e) **Termination of Exchange Fund.** At any time after six months following the Effective Time, Parent shall be entitled to require the Exchange Agent to deliver to it any amount distributed to the Exchange Agent in respect of such payments that has not been disbursed to the holders of shares of the Company Stock and thereafter such holders may look only to Parent (subject to abandoned property, escheat or other similar Laws) as general creditors thereof with respect to the payment of any portion thereof that may be payable upon surrender of any shares of Company Stock held by such holders.

2.15 **No Liability.** Notwithstanding anything in this Agreement to the contrary, none of the Parties or the Exchange Agent shall be liable to any Person for any portion of the payments contemplated by this ARTICLE II delivered to a public official pursuant to any applicable abandoned property, escheat or similar Law.

2.16 **Withholding Taxes.** Notwithstanding anything in this Agreement to the contrary, Parent, the Company, the Surviving Company and the Exchange Agent shall be entitled to deduct and withhold from that portion of any payments contemplated by this ARTICLE II or any other amount payable to a Holder pursuant to this Agreement, and shall pay to the appropriate Taxing Authority, such amounts that are required to be deducted and withheld with respect to the making of such payments under any Tax Law. To the extent amounts are so deducted and withheld and timely paid over in full to the appropriate Taxing Authority, such amounts shall be treated for purposes of this Agreement as having been paid to the Holder in respect of which such deduction and withholding were made.

2.17 **Adjustments.** Notwithstanding any provision of this ARTICLE II to the contrary (but without in any way limiting the covenants in Section 5.1 (Conduct of Business)), if between the Agreement Date and the Effective Time the outstanding shares of any class or series of Company Stock are changed into a different number of shares or a different class or series by reason of the occurrence or record date of any stock dividend, subdivision, reclassification, recapitalization, split, combination, exchange of shares or similar transaction, the per share consideration payable pursuant to Section 2.6 shall be appropriately adjusted to reflect such stock dividend, subdivision, reclassification, recapitalization, split, combination, exchange of shares or similar transaction.

2.18 **Post-Closing Adjustment Amount.**
(a) **Preparation of Closing Statement.** Within ninety (90) days following the Closing Date, Parent shall prepare and deliver to Holders’ Representative a statement as of the Closing (the “Final Calculation”) setting forth its calculation of each of the following:

(i) the Closing Cash;

(ii) the Closing Net Working Capital;

(iii) the Unpaid Transaction Expenses;

(iv) the Closing Debt; and

(v) the resulting Final Purchase Price.

The Final Calculation shall be accompanied by such supporting documentation reasonably necessary to derive the numbers set forth therein. The Final Calculation shall be final, conclusive and binding upon the Parties unless Holders’ Representative delivers a written notice to Parent of any objection to the Final Calculation (the “Objection Notice”) within thirty (30) days (the “Objection Period”) after delivery of the Final Calculation. Any Objection Notice must set forth in reasonable detail (x) any item on the Final Calculation that Holders’ Representative believes has not been prepared in accordance with this Agreement and the correct amount of such item and (y) Holders’ Representative’s alternative calculation of the Closing Cash, the Closing Net Working Capital, the Unpaid Transaction Expenses, the Closing Debt or the Aggregate Exercise Amount, as the case may be. Any Objection Notice must specify, with reasonable particularity, all facts that form the basis of such disagreements and all statements by Persons (who shall be identified by name) and documents relied upon by Holders’ Representative as forming the basis of such disagreement. If Holders’ Representative gives any such Objection Notice within the Objection Period, then Holders’ Representative and Parent shall attempt in good faith to resolve any dispute concerning the item(s) subject to such Objection Notice. If Holders’ Representative and Parent do not resolve the issues raised in the Objection Notice within thirty (30) days of the date of delivery of such notice (the “Initial Resolution Period”), such dispute shall be resolved in accordance with the procedures set forth in Section 2.18(b). Any item or amount which has not been disputed in the Objection Notice shall be final, conclusive and binding on the Parties on the expiration of the Initial Resolution Period (for clarity, excluding any item or amount which is dependent on another item or amount that has been disputed in the Objection Notice).

(b) **Resolution of Disputes.** If Parent and Holders’ Representative have not been able to resolve a dispute within the Initial Resolution Period, either Party may submit such dispute to and such dispute shall be resolved fully, finally and exclusively, through the use of an independent international accounting firm selected to serve as such by mutual agreement of Parent and Holders’ Representative (such accounting firm, the “Reviewing Party”). The fees and expenses of the Reviewing Party incurred in the resolution of such dispute shall be borne by the parties (in the case of the Holders’ Representative, on behalf of the Holders) in such proportion as is appropriate to reflect the relative benefits received by the Holders and Parent from the resolution of the dispute. For example, if Holders’ Representative challenges the calculation in the Final Calculation by an amount of $100,000, but the Reviewing Party determines that Holders’ Representative has a valid
claim for only $40,000, Parent shall bear 40% of the fees and expenses of the Reviewing Party and Holders’ Representative on behalf of the Holders shall bear the other 60% of such fees and expenses. The Reviewing Party shall determine (with written notice thereof to Holders’ Representative and Parent) as promptly as practicable, but in any event within thirty (30) days following the date on which Final Calculation and written submissions detailing the disputed items are delivered to the Reviewing Party (i) whether the Final Calculation was prepared in accordance with the terms of this Agreement or, alternatively, (ii) only with respect to the disputed items submitted to the Reviewing Party, whether and to what extent (if any) the Final Calculation requires adjustment and a written explanation in reasonable detail of each such required adjustment, including the basis therefor (it being understood that any determination of a disputed item shall be not greater or less than the amount of such disputed item as proposed by Parent in the Final Calculation or as proposed by Holders’ Representative in the Objection Notice). Parent and Holders’ Representative shall require the Reviewing Party to enter into a confidentiality agreement on terms agreeable to Parent, Holders’ Representative and the Reviewing Party. The procedures of this Section 2.18(b) are exclusive and the determination of the Reviewing Party shall be final and binding on the Parties. The decision rendered pursuant to this Section 2.18(b) may be filed as a judgment in any court of competent jurisdiction.

(c) Post-Closing Purchase Price Adjustment.

(i) The “Post-Closing Adjustment” shall be an amount equal to the Final Purchase Price less the Upfront Purchase Price and, for the avoidance of doubt, may be a positive or a negative number or zero.

(ii) Without limiting the provisions of Section 8.2(a)(i) (except to the extent of any double counting that would otherwise result), if the Post-Closing Adjustment is a negative number, the Indemnification Hold-Back Cash Amount and the Indemnification Hold-Back Shares (valued at the Indemnification Hold-Back Shares Value) shall be reduced (in the aggregate) by the absolute value of the Post-Closing Adjustment, pro rata in proportion to their relative values as of the Closing Date.

(iii) If the Post-Closing Adjustment is a positive number, Parent shall deliver to the Holders in accordance with the Allocation Schedule (or cause to be delivered by the Exchange Agent) cash in an amount equal to the Post-Closing Adjustment.

2.19 Indemnification Hold-Back and Payment. On the date that is twelve (12) months following the Closing Date (such date, the “First Indemnification Hold-Back Payment Date”), Parent shall deliver to the Holders in accordance with the Allocation Schedule, as it may be adjusted (or cause to be delivered by the Exchange Agent), cash in an amount equal to half of the initial Indemnification Hold-Back Cash Amount and half of the initial Indemnification Hold-Back Shares, as applicable (reflecting any reductions to the Indemnification Hold-Back Cash Amount and the Indemnification Hold-Back Shares made in accordance with Section 2.18(c)(ii) or ARTICLE VIII, it being understood that if such reductions equal or exceed half of the initial Indemnification Hold-Back Cash Amount or the Indemnification Hold-Back Shares, then no release to the Holders will be made on such date); provided, however, that if, when any amount would otherwise be distributed pursuant to this Section 2.19 on the First Indemnification Hold-Back Payment Date, there shall
exist a timely made good faith claim by Parent in accordance with ARTICLE VIII to exercise the Offset Right, all or a portion of such amount as determined by Parent (in its reasonable discretion) to represent the Losses at issue specified in such claim (including, if applicable, as to any specific Holder) shall, subject to compliance with the procedures specified in ARTICLE VIII, be withheld from payment until such time as the claim has been finally resolved in accordance with ARTICLE VIII, in which case the Offset Right shall apply against such portion of the amount at issue resolved in favor of Parent, if any, and the balance of any withheld portion (if applicable) shall be distributed to the Holders (or, as applicable, to the affected Holders) as contemplated by this Agreement. On the date that is twenty four (24) months following the Closing Date (such date, the “Second Indemnification Hold-Back Payment Date” and, together with the First Indemnification Hold-Back Amount, the “Indemnification Hold-Back Payments Dates”), Parent shall deliver to the Holders in accordance with the Allocation Schedule, as it may be adjusted (or cause to be delivered by the Exchange Agent), cash in an amount equal to the then-current balance of the Indemnification Hold-Back Cash Amount and the remaining Indemnification Hold-Back Shares, as applicable (reflecting any reductions to the Indemnification Hold-Back Cash Amount and the Indemnification Hold-Back Shares made in accordance with Section 2.18(c)(ii) or ARTICLE VIII); provided, however, that if, when any amount would otherwise be distributed pursuant to this Section 2.19 on the Second Indemnification Hold-Back Payment Date, there shall exist a timely made good faith claim by Parent in accordance with ARTICLE VIII to exercise the Offset Right, all or a portion of such amount as determined by Parent (in its reasonable discretion) to represent the Losses at issue specified in such claim (including, if applicable, as to any specific Holder) shall, subject to compliance with the procedures specified in ARTICLE VIII, be withheld from payment until such time as the claim has been finally resolved in accordance with ARTICLE VIII, in which case the Offset Right shall apply against such portion of the amount at issue resolved in favor of Parent, if any, and the balance of any withheld portion (if applicable) shall be distributed to the Holders (or, as applicable, to the affected Holders) as contemplated by this Agreement.

2.20 Effect of the Forward Merger on Capital Stock. At the effective time of the Forward Merger, by virtue of the Forward Merger and without any action to be taken on the part of the holder of any shares of the Company Stock or any units of membership interest in Merger Sub B, or on the part of the Company, Parent, Merger Sub B or any other Person:

  (a) each share of capital stock of the Company outstanding immediately prior to the effective time of the Forward Merger shall be canceled and shall cease to exist and no consideration shall be delivered in exchange therefor; and

  (b) each unit of membership interest in Merger Sub B outstanding immediately prior to the effective time of the Forward Merger shall remain unchanged and continue to remain outstanding as a unit of membership interest in the Surviving Company. At the effective time of the Forward Merger, Parent shall continue as the sole holder of membership interests in the Surviving Company.

2.1 Intended Tax Treatment. The Parties intend that for U.S. federal income tax purposes the Mergers be treated as a single integrated transaction, as described in Revenue Ruling 2001-46, 2001-2 CB 321, that constitutes a “reorganization” within the meaning of Section 368(a) of the
Code and the Treasury Regulations promulgated thereunder (the “Intended Tax Treatment”). The Parties adopt this Agreement as a “plan of reorganization” within the meaning of Treasury Regulations Section 1.368-2(g). Notwithstanding any provision herein to the contrary, (x) if Parent, in its reasonable discretion, believes that the intent of this Section 2.21 is served by issuing an amount of shares of Parent Common Stock in lieu of a portion of the cash otherwise payable to the Consenting Holders upon release of any portion of the Indemnification Hold-Back Cash Amount, then Parent may, with the Holders’ Representative’s prior written consent (not to be unreasonably withheld), effect such substitution and the value of such shares shall be determined based upon the average closing price of such shares on The New York Stock Exchange for the period of twenty (20) trading days ending two (2) trading days prior to the date of any such release of any portion of the Indemnification Hold-Back Cash Amount then at issue, (y) subject to Section 4.1 and Section 5.8(k), no Party and no Parent Indemnified Person shall have any liability to any Holder with respect to the tax treatment or the tax consequences of the Mergers or the other Transactions, and (z) each Holder shall be solely responsible with respect to the tax treatment of the Mergers and the other Transactions as to such Holder as well as the tax consequences thereof.

ARTICLE III

REPRESENTATIONS AND WARRANTIES OF THE COMPANY

As a material inducement to Parent, Merger Sub A and Merger Sub B to enter into this Agreement and effect the Mergers, with the understanding that Parent, Merger Sub A and Merger Sub B are relying thereon in entering into this Agreement and consummating the Transactions (including the Mergers), the Company hereby represents and warrants to Parent and Merger Sub A and Merger Sub B, subject to such exceptions as are set forth in the Disclosure Schedule (provided that the Disclosure Schedule shall be arranged in sections corresponding to the numbered and lettered sections and subsections of this Agreement, and the disclosures in any section or subsection of the Disclosure Schedule shall qualify other sections and subsections of this Agreement only to the extent it is reasonably apparent on its face that such disclosure is applicable to such other sections and subsections), as of the Agreement Date and as of the Closing Date as follows:

3.1 Organizational Matters.

(a) Valid Existence; Good Standing. The Company is a corporation duly incorporated, validly existing and in good standing under the Laws of the State of Delaware and has all requisite power and authority to own or lease all of its properties and assets and to carry on its business as now conducted. The Company is duly licensed or qualified to do business and is in good standing under the laws of Delaware and each other jurisdiction in which the nature of the business conducted by it or the character or location of the properties and assets owned, leased or licensed by it makes such licensing or qualification necessary.

(b) Operations. Section 3.1(b) of the Disclosure Schedule lists each state and country in which any member of the Company Group has assets or Leased Real Property.

(c) Subsidiaries. Other than Genelex India Private Limited having Corporate Identity Number U72200TG2014PTC094218 (“Genelex India” and together with the Company,
the “Company Group”), the Company has no Subsidiaries and does not own and never has owned, directly or indirectly, any shares of capital stock, voting securities, or equity interests in any Person. The Company has no obligation to make an investment (in the form of a purchase of equity securities, loan, capital contribution or otherwise) directly or indirectly in any Person. Genelex India is duly incorporated, validly existing and in good standing under the Laws of India and has all requisite power and authority to own or lease all of its properties and assets and to carry on its business as now conducted. Genelex India is duly licensed or qualified to do business and is in good standing under the laws of India and each other jurisdiction in which the nature of the business conducted by it or the character or location of the properties and assets owned, leased or licensed by it makes such licensing or qualification necessary. The authorized and paid up share capital of Genelex India is INR 100,000, consisting of 10,000 equity shares of INR 10 each. Except as set forth in this Section 3.1(c), there are no, and as of the Closing there shall be no, shares of capital stock, voting securities or equity interests of Genelex India issued and outstanding or any subscriptions, options, warrants, calls, convertible or exchangeable securities, rights, commitments or agreements of any character providing for the issuance of any shares of capital stock, voting securities or equity interests of the Genelex India, including any representing the right to purchase or otherwise receive any capital stock of Genelex India. All issued and outstanding shares of capital stock of Genelex India are owned of record and beneficially as set forth in Section 3.1(c) of the Disclosure Schedule.

(d) Corporate Documents. The Company has delivered or made available to Parent true and complete copies of the certificate of incorporation and bylaws (or equivalent documents) of the Company as the same may have been amended from time to time (collectively, the “Company Charter Documents”), as well as the organizational documents of Genelex India. All such Company Charter Documents are unmodified and in full force and effect and no member of the Company Group is in violation of any provision of the Company Charter Documents. No board of directors or equivalent governing body of any member of the Company Group has proposed or approved any amendment of any of the Company Charter Documents. The Company has delivered or made available to Parent and its representatives true and complete copies of the stock ledger of the Company and of the minutes of all meetings of the stockholders, the board of directors (or equivalent governing body) of the Company held since the Reference Date.

(e) Officers and Directors. Section 3.1(e) of the Disclosure Schedule lists all of the directors and officers of each member of the Company Group as of the Agreement Date.

3.2 Authority; Noncontravention; Voting Requirements.

(a) Power and Authority. The Company has all necessary power and authority to execute and deliver this Agreement and the Transaction Agreements to which it is a party and to perform all of its obligations hereunder and thereunder and to consummate the Transactions (including the Mergers).

(b) Due Authorization of Agreement. The Company’s board of directors, at a meeting duly called and held pursuant to the DGCL, has unanimously (subject to any recusal by a director for actual or potential conflicts of interest) (i) approved and declared advisable and in the best interests of the Company and the Company Stockholders the Transaction Agreements and the Transactions (including the Mergers) and (ii) recommended that the Company Stockholders adopt
this Agreement and approve the Transactions (including the Mergers). The execution, delivery and performance by the Company of this Agreement and the Transaction Agreements to which it is a party and the consummation by it of the Transactions (including the Mergers) have been duly authorized by the Company’s board of directors and, subject to adoption of this Agreement by the affirmative vote or written consent of the Company Stockholders representing the requisite number of shares of Company Stock required under the DGCL and the Company Charter Documents (the “Requisite Stockholder Approval”), no other action on the part of the Company’s board of directors or the Company Stockholders is necessary to authorize the execution, delivery and performance by the Company of this Agreement and the Transaction Agreements to which it is a party and the consummation by it of the Transactions (including the Mergers).

(c) **Valid and Binding Agreements.** This Agreement and each of the other Transaction Agreements to which the Company is a party have been, or will be as of the Closing Date, duly executed and delivered by the Company. Assuming due authorization, execution and delivery of this Agreement and the other Transaction Agreements by the other Parties hereto and thereto, this Agreement constitutes and the other Transaction Agreements shall, when executed and delivered, constitute, the legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms, except to the extent that their enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium, or other similar laws affecting the enforcement of creditors’ rights generally and by general equitable principles.

(d) **No Conflict.** Neither the execution, delivery or performance of this Agreement nor the consummation of the Transactions shall (i) conflict with or result in any violation of or default (with or without notice or lapse of time, or both), or (ii) give rise to a right of termination, cancellation, modification or acceleration of any obligation or loss of any benefit or result in the creation of any Lien upon any of the properties or assets of any member of the Company Group (any such event, a “Conflict”), in each case under or pursuant to (x) any provision of the Company Charter Documents, the organizational documents of Genelex India or any resolutions adopted by board of directors (or equivalent governing body) or the stockholders of any member of the Company Group, (y) any Material Contract to which any member of the Company Group is a party or by which any member of the Company Group or any of its properties or assets may be bound or affected, or (z) any Permit issued to any member of the Company Group or any Order or Law applicable to any member of the Company Group or any of its properties or assets (whether tangible or intangible). Following the Closing Date, each member of the Company Group shall continue to be permitted to exercise all of its rights under all Material Contracts to which it is a party without the payment of any additional amounts or consideration other than ongoing fees, royalties or payments which such member of the Company Group would otherwise be required to pay pursuant to the terms of such Material Contracts had the Transactions contemplated by this Agreement not occurred.

3.3 **Capitalization.**

(a) **Authorized and Issued Securities.** The authorized capital stock of the Company consists of 400,000,000 shares of Company Stock and no shares of preferred stock. The capitalization of the Company is as follows: (i) 258,613,704 shares of Company Stock are issued and outstanding, (ii) no shares of Company Stock are held by the Company in its treasury, (iii)
11,070,111 shares of Company Stock are issuable in satisfaction of the Company Notes in connection with the Transactions, (iv) 23,133,882 shares of Company Stock are subject to outstanding options under the Company Option Plan (i.e., the Company Options), (v) no outstanding options have been issued outside the Company Option Plan, and (vi) a sufficient number of Company Stock is available for issuance upon exercise or conversion of all outstanding Company Options and the Company Notes. Except as set forth in this Section 3.3(a), there are no, and as of the Closing (after giving effect to the issuance of shares of Company Stock in respect of the Company Notes) there shall be no, shares of Company Stock, voting securities or equity interests of the Company issued and outstanding or any subscriptions, options, warrants, calls, convertible or exchangeable securities, rights, commitments or agreements of any character providing for the issuance of any shares of capital stock, voting securities or equity interests of the Company, including any representing the right to purchase or otherwise receive any Company Stock.

(b) Ownership of Stock, Options and Company Notes. Section 3.3(b) of the Disclosure Schedule sets forth a complete and accurate list of each of (i) the record holders of Company Stock and the number of shares of Company Stock held by each Holder as of the Agreement Date and the number of shares or other securities into which such Company Stock is convertible, listed by class and series, (ii) all Company Options and the Company Optionholders thereof as well as the exercise prices, dates of grant and numbers of shares of Company Stock for which such Company Options are exercisable by each such Company Optionholder as of the Agreement Date, and (iii) the Company Notes and the holders thereof as well as the shares of Company Stock issuable in full satisfaction thereof. All issued and outstanding shares of Company Stock are owned of record and beneficially as set forth in Section 3.3(b) of the Disclosure Schedule.

(c) Valid Issuance; No Preemptive or Other Rights.

(i) All issued and outstanding shares of Company Stock (x) are, and all shares of Company Stock that may be issued pursuant to the exercise of Company Options and the conversion of the Company Notes shall be, when issued in accordance with the respective terms thereof, duly authorized, validly issued, fully paid and nonassessable, (y) are not subject to, nor were issued in violation of, any preemptive rights, rights of first offer or refusal, co-sale rights or similar rights arising under applicable Law or pursuant to the Company Charter Documents, or any Contract to which the Company is a party or by which it is bound and (z) have been offered, issued, sold and delivered by the Company in compliance with all registration or qualification requirements (or applicable exemptions therefrom) of applicable federal, state and foreign securities Laws. Each Company Option granted under the Company Option Plan was duly authorized by all requisite corporate action on a date no later than the grant date and has an exercise price per share at least equal to the fair market value of a share of Company Stock on the grant date. The Company is not under any obligation to register any of its presently outstanding securities, or securities issuable upon exercise or conversion of such securities, under the Securities Act or any other Law.

(ii) The rights, preferences and privileges of the Company Stock are as set forth in the Company Charter Documents. There is no liability for dividends accrued and/or declared but unpaid with respect to the outstanding Company Stock. No member of the Company Group is subject to any obligation to repurchase, redeem or otherwise acquire any shares of Company
Stock or any other voting securities or equity interests (or any options, warrants or other rights to acquire any shares of Company Stock, voting securities or equity interests) of any member of the Company Group. To the Company’s Knowledge, there are no voting trusts or other agreements or understandings with respect to the voting of the Company Stock. There are no outstanding or authorized stock appreciation, phantom stock, profit participation, or other similar rights with respect to any member of the Company Group.

(iii) True and complete copies of all form agreements and instruments (and any amendments thereto, if applicable) relating to or issued under the Company Option Plan have been delivered or made available to Parent; there are no agreements to amend, modify or supplement such agreements or instruments from the forms thereof provided or made available to Parent; and all equity grants under the Company Option Plan have been made pursuant to agreements and instruments and do not deviate from such form agreements and instruments.

3.4 No Consents or Approvals. Except for the filing of the Certificates of Merger with the Secretary of State of the State of Delaware pursuant to the DGCL and the receipt of the Requisite Stockholder Approval and the consents and approvals described on Section 3.4 of the Disclosure Schedule, no consents or approvals of, filings with, or notices to any Governmental Authority or Person are required to be made or obtained by the Company for the valid execution, delivery and performance of this Agreement or the other Transaction Agreements to which it is a party, and the consummation of the Transactions (including the Mergers).

3.5 Financial Matters.

(a) Financial Statements.

(i) Prior to the Agreement Date, the Company has delivered or made available to Parent true and complete copies of the following financial statements of the Company Group (collectively, the “Financial Statements”): (x) the unaudited balance sheet and related unaudited statements of income, cash flows and stockholders’ equity as of and for the fiscal year ended December 31, 2019 (the “Balance Sheet” and such date the “Balance Sheet Date”); and (y) the unaudited balance sheet and related unaudited statements of income, cash flows and stockholders’ equity as of and for the two (2)-month period ended February 29, 2020 (the “Interim Balance Sheet” and such date the “Interim Balance Sheet Date”).

(ii) The books and records of the Company Group (x) have been and are being maintained in accordance with GAAP and (y) are complete, properly maintained and do not contain or reflect any material inaccuracies or discrepancies.

(b) Fair Presentation. The Financial Statements were prepared in accordance with GAAP applied on a consistent basis throughout the periods covered thereby. The Financial Statements fairly present the financial condition of the Company Group as of such dates and the results of operations of the Company Group for such periods, and were derived from and are consistent with the books and records of the Company Group; provided, however, that the Financial Statements as of and for the period ended on the Interim Balance Sheet Date are subject to normal year-end adjustments (which shall not be material individually or in the aggregate). Since the
Reference Date, the Company has not effected any material change in any method of accounting or accounting practice.

(a) **Internal Controls; Financial Controls.** Each member of the Company Group maintains systems of internal accounting and financial reporting controls that are sufficient to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP, including policies and procedures sufficient to provide reasonable assurance: (i) that each member of the Company Group maintains records that in reasonable detail accurately and fairly reflect, in all material respects, such member’s transactions and dispositions of assets; (ii) that transactions are recorded as necessary to permit the preparation of financial statements in conformity with GAAP; (iii) that receipts and expenditures are being made only in accordance with authorizations of management and such member’s board of directors or equivalent governing body; and (iv) regarding prevention or timely detection of unauthorized acquisition, use or disposition of such member’s assets that could have a material effect on the Financial Statements. The Company has delivered to Parent a true and complete copy of any disclosure (or, if unwritten, a summary thereof) by any representative of any member of the Company Group to the Company Group’s independent auditors relating to any material weaknesses in internal controls and any significant deficiencies in the design or operation of internal controls that would adversely affect the ability of the Company Group to record, process, summarize and report financial data. The Company has no Knowledge of any fraud or whistle-blower allegations, whether or not material, that involve management or other Employees or Consultants who have or had a significant role in the internal control over financial reporting of any member of the Company Group. Since the Reference Date, there have been no material changes in any member of the Company Group’s internal control over financial reporting.

(b) **No Undisclosed Liabilities.** The Company Group does not have any Liabilities that are not reflected or reserved against on the face of (and not in the notes to) the Financial Statements, except Liabilities (i) incurred by the Company Group in connection with the preparation, execution, delivery and performance of the Transaction Agreements and included in the Company Transaction and Bonus Expenses, or (ii) which have arisen in the Ordinary Course of Business since the Interim Balance Sheet Date and which are not in excess of $25,000 in the aggregate.

(c) **Off-Balance-Sheet Arrangements.** There are no “off-balance-sheet arrangements” (within the meaning of Item 303 of Regulation S-K promulgated by the SEC) with respect to the Company Group.

(d) **Bank Accounts.** Section 3.5(f) of the Disclosure Schedule sets forth an accurate list (account type, name and address) of each bank and other financial institution in which each member of the Company Group maintains an account (whether checking, savings or otherwise), lock box or safe deposit box and the names of the persons having signing authority or other access thereto. All cash in such accounts is held in demand deposits and is not subject to any restriction as to withdrawal.

(e) **Company Debt.** Except as set forth in Section 3.5(g) of the Disclosure Schedule, there is no Company Debt. With respect to each item of Company Debt, Section 3.5(g)
of the Disclosure Schedule accurately sets forth the name and address of the creditor, the Contract under which such debt was issued, the principal amount of the debt and a description of the collateral if secured. No member of the Company Group is in default with respect to any outstanding Company Debt or any instrument relating thereto, nor is there any event which, with the passage of time or giving of notice, or both, would result in a default, and no such Company Debt or any instrument or agreement thereto purports to limit the operation of such member of the Company Group’s business. Complete and correct copies of all instruments (including all amendments, supplements, waivers and consents) relating to any Company Debt have been provided or made available to Parent.

3.6 Absence of Certain Changes or Events. Since the Balance Sheet Date, (i) there has not been a Company Material Adverse Effect and (ii) there has not occurred any damage, destruction or loss (whether or not covered by insurance) of any material asset of any member of the Company Group that adversely affects the use thereof. Since the Balance Sheet Date, each member of the Company Group has been operated in the Ordinary Course of Business and, without limiting the foregoing, no member of the Company Group has taken any action described in Section 5.1 that if taken after the Agreement Date and prior to the Closing would violate such provision.

3.7 Legal Proceedings. Since the Reference Date, there have not been and there are no pending Actions, and there are no Actions threatened in writing, in either case, by or against any member of the Company Group, its properties or assets or any of the Company Group’s officers or directors in their capacities as such, nor to the Knowledge of the Company, are there any circumstances that would constitute a basis therefor.

3.8 Compliance with Laws; Permits.

(a) Each member of the Company Group is, and since the Reference Date, has been in compliance in all material respects with all Laws applicable to such member of the Company Group or any of its assets, business or operations, including the Health Care Laws. Each member of the Company Group holds all Permits necessary to conduct its business and own, lease and operate its properties and assets, and all such Permits are in full force and effect. Each member of the Company Group is and has always been in compliance in all material respects with the terms of all Permits necessary to conduct its business and to own, lease and operate its properties and facilities. Section 3.8(a) of the Disclosure Schedule sets forth a list of all Permits that are held by the Company Group. No member of the Company Group has received written notice from any Governmental Authority claiming or alleging that any member of the Company Group was not in compliance with all Laws applicable to such member or its business or operations; no member of the Company Group has been assessed any material penalty with respect to any alleged failure by such member of the Company Group to have or comply with any Permit.

(b) No member of the Company Group, nor any of their respective officers, directors, Employees, Consultants or agents, have, in the operating of such member’s business, engaged in any activities which are prohibited or are cause for criminal or material civil penalties or mandatory or permissive exclusion from Medicare, Medicaid or any other state or federal health care program under 42 U.S.C. §§ 1320a-7, 1320a-7a, 1320a-7b or 1395nn, 5 U.S.C. § 8901 et seq. (the Federal Employees Health Benefits program statute), or the regulations, agency guidance, or
similar legal requirement promulgated pursuant to such statutes or any analogous state or local Laws.

(c) No member of the Company Group, nor any of their respective directors, officers, Employees, Consultants or agents, has, directly or indirectly given or agreed to give any illegal gift, contribution, payment or similar benefit to any supplier, customer, governmental official or employee or other Person.

(d) (i) Each Current Employee and Current Consultant of any member of the Company Group required to be licensed by an applicable Governmental Authority, professional body and/or medical body has such licenses, (ii) such licenses are in full force and effect and (iii) to the Knowledge of the Company, there are no facts or circumstances that would reasonably be expected to result in any such licenses being suspended, revoked or otherwise lapse prematurely.

(e) No member of Company Group nor any of their respective Current Employees, or, to the Company’s Knowledge, any of their respective Current Consultants, agents or vendors (in the case of such Current Consultants, agents or vendors, solely in connection with their services to the Company), has been excluded, suspended, debarred or otherwise sanctioned by any Governmental Authority, including the U.S. Department of Health and Human Services Office of Inspector General or the General Services Administration.

(f) Each member of the Company Group is and, since the Reference Date, has been in compliance in all respects with all applicable Laws relating to the privacy, security, use and disclosure of health information, including “protected health information” or “PHI” as defined under HIPAA and information related to genetic testing and genetic test results, created, used, disclosed or stored in the course of the operations of such member of the Company Group, including, as applicable, HIPAA and all state, federal and international laws regarding the privacy and security of health information, including genetic testing and results. Each member of the Company Group has the necessary agreements with all of the Company Group’s “business associates” as such term is defined by and as such agreements are required by HIPAA. True and complete copies of all HIPAA and health information privacy policies that have been used by the Company Group since the Reference Date have been provided or made available to Parent and such privacy policies are in compliance with all applicable Laws relating to the privacy, security, use and disclosure of health information. Each member of the Company Group has since the Reference Date materially complied with all rules, policies, and procedures established by such member of the Company Group from time to time and as applicable with respect to privacy, security, data protection, or the collection and use of health information and genetic testing information created, used, disclosed or stored in the course of the operations of such member of the Company Group. Since the Reference Date, no actions have been asserted in writing or, to the Knowledge of the Company, otherwise asserted or threatened, against any member of the Company Group by any person alleging a violation of such person’s privacy, personal, or confidentiality rights under any such rules, policies, or procedures.

(g) With respect to all health information, PHI, and genetic testing information as described in Section 3.8(f), each member of the Company Group has taken reasonable steps (including implementing and monitoring compliance with administrative, physical and technical safeguards) to protect against loss and against unauthorized access, use, modification, disclosure,
or other misuse. Each member of the Company Group maintains and has implemented security policies and procedures as required by HIPAA and other applicable laws. Since the Reference Date, there has been no “Breach of Unsecured PHI,” as defined under HIPAA, and no “Security Incident” as defined under HIPAA, resulting in the unauthorized use or disclosure of PHI. Each member of the Company Group maintains systems, policies and procedures to respond to incidents and complaints alleging violations of applicable privacy or security standards and to identify and report all Breaches of Unsecured PHI in accordance with such member of the Company Group’s legal and contractual obligations.

3.9 Taxes.

(a) Each member of the Company Group has paid all Taxes owed by it (without regard to whether or not such Taxes are or were disputed), whether or not shown on any Tax Return. Since the Balance Sheet Date, no member of the Company Group has incurred any Liability for Taxes arising outside of the Ordinary Course of Business. There are no Liens for or with respect to Taxes (other than Permitted Liens) on any of the assets of any of the members of the Company Group. No member of the Company Group is subject to any currently effective waiver of any statute of limitations in respect of any material amount of Taxes or has agreed to any currently effective extension of time with respect to a Tax assessment or deficiency.

(b) Each member of the Company Group has timely filed all Tax Returns that are required to have been filed by such member of the Company Group. All such Tax Returns were, when filed, true, correct and complete in all respects. No member of the Company Group is the beneficiary of any currently effective extension of time within which to file any Tax Return (other than an extension automatically granted). No written claim has ever been made by any Taxing Authority in a jurisdiction where a member of the Company Group does not file Tax Returns that it is or may be subject to taxation by that jurisdiction, which claim has not been finally resolved.

(c) Each member of the Company Group has withheld and paid all Taxes required to have been withheld and paid by it in connection with amounts paid or owing by such member to any Employee, Consultant, creditor, stockholder or other third party. Each member of the Company Group has properly classified all service providers to such members as employees, independent contractors, or other appropriate status, in accordance and compliance with all applicable Laws, and have timely and correctly completed and filed all applicable reports and forms with respect thereto (including all appropriate IRS Forms W-2, IRS Forms 1099, as applicable).

(d) No deficiencies for any Taxes have been proposed or assessed, in each case in writing, against or with respect to any Taxes due by, or Tax Returns of, any member of the Company Group, which deficiencies have not been finally resolved. No member of the Company Group has received written notice of any audit, assessment, dispute or claim concerning any Tax Liability of such member, which audit, assessment, dispute or claim has not been finally resolved.

(e) No member of the Company Group (i) is or has never been a member of an affiliated group (other than a group the common parent of which is Company) filing a consolidated federal income Tax Return nor (ii) has any Liability for Taxes of any Person arising from the
application of Treasury Regulation Section 1.1502-6 or any analogous provision of state, local or foreign Tax Law, or as a transferee or successor, or pursuant to a Tax Sharing Agreement.

(f) The Company is not, and has not been during the period described in Section 897(c)(1)(A)(ii) of the Code, a “United States real property holding corporation” within the meaning of Section 897(c)(2) of the Code.

(g) No member of the Company Group has made any payments, is obligated to make any payments or is a party to any agreement, including this Agreement and/or any agreements contemplated by this Agreement, that will, or would be expected to, give rise directly or indirectly to the payment of any amount that would be characterized as a “parachute payment” within the meaning of Section 280G(b) of the Code. There is no agreement, plan, arrangement or other contract by which any member of the Company Group is bound to compensate, reimburse otherwise pay to any Person any amounts attributable to excise taxes payable pursuant to Section 4999 of the Code.

(h) No member of the Company Group is or shall be required to include any item of income in, or exclude any item of deduction from, taxable income for any taxable period (or portion thereof) ending after the Closing Date as a result of any: (i) change in method of accounting requested by any member of the Company Group prior to the Closing; (ii) closing agreement entered into by any member of the Company Group with any Taxing Authority prior to the Closing; (iii) installment sale or open transaction disposition made by any member of the Company Group prior to the Closing; or (iv) prepaid amounts received or paid by any member of the Company Group prior to the Closing other than amounts consistent with the deferred revenue shown on the Estimated Balance Sheet

(i) No election has ever been made pursuant to Section 965(h) of the Code with respect to Genelex India.

(j) Within the last two years, no member of the Company Group has distributed stock of another Person in a transaction that was purported or intended to be governed in whole or in part by Section 355 or Section 361 of the Code.

(k) Other than Genelex India, no member of the Company Group has nor has it ever had a permanent establishment in any jurisdiction outside of the United States. Other than Genelex India, no member of the Company Group is or ever has been engaged in the conduct of a trade or business or other activity in any jurisdiction outside of the United States that would cause any member of the Company Group to be obligated to pay Taxes or file Tax Returns in such jurisdiction. Genelex India is not subject to income tax, or obligated to file a Tax Return with respect to income tax, in any country outside of India on account of having a permanent establishment, or being otherwise engaged in the conduct of a trade or business or other activity, in such country.

(l) The Company has delivered or made available to Parent correct and complete copies of all U.S. federal and U.S. state and Indian income Tax Returns and all examination reports and statements of deficiencies filed, or assessed against and agreed to, by any member of the Company Group with respect to Taxes for all taxable periods beginning after December 31, 2015 or, in the case of the Company, the Reference Date.
(m) No member of the Company Group has been a party to any “listed transaction,” as defined in Section 6707A(c) (2) of the Code and Treasury Regulation Section 1.6011-4(b)(2).

(n) No member of the Company Group is a “United States shareholder” within the meaning of Section 951(b) with respect to any Person (other than Genelex India) that is or was treated as a “controlled foreign corporation” as defined in Section 957 of the Code.

(o) Section 3.9(o) of the Disclosure Schedule lists all jurisdictions in which any member of the Company Group has filed income or material other Tax Returns since the Reference Date.

(p) All Taxes (including sales tax, use tax and value-added tax) that were required to be collected or self-assessed by each member of the Company Group have been duly collected or self-assessed, and all such amounts that were required to be remitted to any Taxing Authority have been remitted. Except as set forth in Section 3.09(p) of the Disclosure Schedule, no power of attorney that has been granted by any member of the Company Group with respect to any matter relating to the Taxes of such member is currently in force.

(q) No member of the Company Group has ever (i) made an election under Section 1362 of the Code to be treated as an S corporation for federal income tax purposes or (ii) made a similar election under any comparable provision of any state, local or foreign Tax Law.

(r) No member of the Company Group has ever been a “personal holding company” within the meaning of Section 542 of the Code. Genelex India is classified for U.S. federal income tax purposes as a foreign corporation (within the meaning of the Code) and is not an expatriated entity within the meaning of Section 7874(a)(2) of the Code.

3.10 Employee Benefits and Labor Matters.

(a) Plans and Arrangements. Section 3.10(a) of the Disclosure Schedule sets forth a true and complete list of all Company Plans.

(b) Plan Documents. With respect to each Company Plan, the Company has delivered or made available to Parent a current, accurate and complete copy thereof (including amendments) or a copy of the representative form agreement thereof and, to the extent applicable, true and complete copies of the following documents with respect to each Company Plan: (i) any Contracts or agreements, plans and related trust documents, insurance Contracts or other funding arrangements, in each case as currently in effect, and all amendments thereto; (ii) the results of all non-discrimination testing performed since the Reference Date; (iii) all Forms 5500 and all schedules thereto since the Reference Date; (iv) the most recent actuarial report, if any; (v) the most recent IRS determination or opinion letter; (vi) all correspondence, rulings or opinions issued by the DOL, IRS or any other Governmental Authority and all material correspondence from the Company to the DOL, IRS or other Governmental Authority other than routine reports, returns or other filings since the Reference Date; (vii) the most recent summary plan descriptions and any summaries of
material modifications with respect thereto; and (viii) written descriptions of all non-written Company Plans.

(c) **ERISA.** No Company Plan is subject to Title IV of ERISA or is otherwise a Defined Benefit Plan as defined in Section 3(35) of ERISA (a “Title IV Plan”) and, in the past six (6) years, neither the Company Group or any other trade or business (whether or not incorporated) that, together with any member of the Company Group, would be treated as a single employer under Section 414(b) or (c) of the Code or, solely for purposes of Section 302 of ERISA and Section 412 of the Code, is treated as a single employer under Section 414(m) or (o) of the Code (each an “ERISA Affiliate”) has incurred any liability pursuant to Title IV of ERISA that remains unsatisfied. No member of the Company Group nor any ERISA Affiliate currently, and for the past six (6) years, has sponsored, contributed or had an obligation to contribute, to any Title IV Plan, or any money purchase pension plan subject to Section 412 of the Code. No Company Plan is or, within the past six (6) years, has been a multiemployer plan within the meaning of Section 3(37) of ERISA (a “Multiemployer Plan”) or a multiple employer welfare arrangement within the meaning of Section 3(40) of ERISA. During the past six (6) years, neither the Company nor any of its respective ERISA Affiliates has completely or partially withdrawn from any Multiemployer Plan and no termination liability to the United States Pension Benefit Guaranty Corporation or withdrawal liability to any Multiemployer Plan has been or is reasonably expected to be incurred with respect to any Multiemployer Plan by any member of the Company Group or any of its respective ERISA Affiliates. No member of the Company Group nor any other “disqualified person” or “party in interest,” as defined in Section 4975 of the Code and Section 3(14) of ERISA, respectively, has, to the Company’s Knowledge, engaged in any “prohibited transaction,” as defined in Section 4975 of the Code or Section 406 of ERISA (which is not otherwise exempt), with respect to any Company Plan, nor, to the Company’s Knowledge, have there been any fiduciary violations under ERISA that could subject any member of the Company Group (or any Employee) to any penalty or tax under Section 502(i) of ERISA or Section 4975 of the Code.

(d) **Status of Plans.** Company Plans intended to qualify under Section 401 of the Code or other tax-favored treatment under Subchapter B of Chapter 1 of Subtitle A of the Code has received a favorable determination letter from the IRS or is the subject of a favorable prototype opinion letter from the IRS as to its qualification under the Code and any trusts intended to be exempt from federal income taxation under the Code are so exempt. To the Knowledge of the Company, nothing has occurred with respect to the operation of any Company Plans that would reasonably be expected to cause the loss of such qualification or exemption. No event has occurred and no condition exists with respect to any Company Plan subject to the requirements of Code Section 401(a) that would subject any member of the Company Group to any Tax, fine, Lien, penalty or other liability imposed by ERISA, the Code or other applicable Laws. For each Company Plan with respect to which a Form 5500 has been filed, no material adverse change has occurred with respect to the matters covered by Part V (Compliance Questions) of the most recent Form 5500-SF or Part IV of Schedule H (Compliance Questions) of the most recent Form 5500, as applicable, since the date thereof. None of the Company Plans provides for post-employment life or health coverage for any participant or any beneficiary of a participant, except as may be required under Part 6 of Subtitle B of Title I of ERISA, Section 4980B of the Code or any similar state law and at the expense of the participant or the participant’s beneficiary.
(e) **Contributions to Plans.** All contributions required to have been made under any of the Company Plans or by Law (without regard to any waivers granted under Section 412 of the Code) have been timely made. There are no unfunded liabilities or benefits under any Company Plans that are not reflected in the Financial Statements.

(f) **Conformity with Laws.** All Company Plans have been established, operated and maintained in accordance with their terms and with all applicable provisions of ERISA, the Code and other Laws. All amendments and actions required to bring the Company Plans into conformity in all material respects with all of the applicable provisions of the Code, ERISA and other applicable Laws have been made or taken, except to the extent that such amendments or actions are not required by Law to be made or taken until a date after the Closing. There are no pending Actions arising from or relating to the Company Plans (other than routine benefit claims), nor does the Company have any Knowledge of facts that could form or would reasonably be expected to form the basis for any such Action. There are no filings or applications pending with respect to the Company Plans with the IRS, the DOL or any other Governmental Authority. Each member of the Company Group has satisfied obligations applicable to such member under Section 4980B of the Code, Part 6 of Subtitle B of Title I of ERISA and each applicable state law relating to continuation of health or other coverage to any Employee (or any dependent or former dependent of such Employee) with respect to any qualifying event that has occurred on or before the Closing Date. Section 3.10(f) of the Disclosure Schedule lists each individual who, as of the Agreement Date, (i) is currently receiving continuation coverage under COBRA under a Company Plan, or (ii) is within his or her COBRA election period.

(g) **Leased Employees.** No member of the Company Group has any Employees who are “leased employees” (as that term is defined in Section 414(n) of the Code) or has any liability, contingent or otherwise, for any federal, state or local workers’ compensation contribution, with respect to any Employees who are leased employees.

(h) **Employment Matters.**

(i) Section 3.10(h)(i) of the Disclosure Schedule sets forth a true and complete listing of any Current Employee and any Current Consultant, as of the Agreement Date, including each such person’s name, job title or function and job location, as well as a true, correct and complete listing of his or her current salary or wage payable by a member of the Company Group, and for each such Current Employee or such Current Consultant, the amount of all incentive compensation paid or payable to such person for the current calendar year, and each such Current Employee’s or such Current Consultant’s current status (as to leave or disability status and full time or part time, exempt or nonexempt and temporary or permanent status and as to classification as an employee, consultant or independent contractor). Other than as fully reflected or specifically reserved against accordance with GAAP in the Financial Statements (or as otherwise expressly permitted or required pursuant to this Agreement), no member of the Company Group has paid or promised to pay any bonuses, commissions or incentives to any Employee or Consultant. The Company has delivered or made available to Parent a true and complete copy of the employee handbook for each member of the Company Group, if any, and all other employment policies, if any, currently applicable to any Current Employee or Current Consultant.

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(ii) To the Company’s Knowledge, no officer, Current Consultant or Current Employee at the level of
director (solely on a full-time basis) or higher has disclosed any plans to terminate his, her or their employment or other relationship
with any member of the Company Group.

(iii) The Company has a USCIS Form I-9 that is validly and properly completed in accordance with
applicable Law in all material respects for each Employee with respect to whom such form is required by applicable Law. The
Company has complied with all Department of Homeland Security, DOL and State Department regulations governing the
employment of foreign national workers in all material respects. The Company has complied with all Laws related to H-1B workers,
including the payment of wages and the maintenance of public access files related to the filing of ETA-9035 Labor Condition
Applications, in all material respects.

(iv) Except as set forth in Section 3.10(h)(iv) of the Disclosure Schedule:

(A) since the Reference Date: (x) each member of the Company Group has paid or made provision
for payment of all salaries and wages, which are payable by such member to any Employees, accrued through the Closing Date and
is in compliance with all applicable Laws respecting employment and employment practices, terms and conditions of employment,
collective bargaining, immigration, wages, hours and benefits, non-discrimination in employment, workers’ compensation, including
Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act of 1967, the Equal Employment Opportunity
Act of 1972, ERISA, the Equal Pay Act, the National Labor Relations Act, the Fair Labor Standards Act, the Americans with
Disabilities Act of 1990, the Vietnam Era Veterans Reemployment Act, the Family and Medical Leave Act, Occupational Safety and
Health Act of 1970 and any and all similar applicable state and local Laws; and (y) no member of the Company Group has been
engaged in any unfair employment practice, as defined in the National Labor Relations Act or other applicable Law;

(B) since the Reference Date, no member of the Company Group has received a written notice,
citation, complaint or charge asserting any violation or liability under the federal Occupational Safety and Health Act of 1970 or any
similar applicable Law regulating employee health and safety;

(C) (u) none of the Current Employees is represented by any labor union or other labor representative
with respect to his or her employment with any member of the Company Group; (v) there are no labor, collective bargaining
agreements or similar arrangements binding on any member of the Company Group with respect to any Current Employees; (w)
since the Reference Date, no petition has been filed nor has any proceeding been instituted by any Employee or group of Employees
with the National Labor Relations Board or similar Governmental Authority seeking recognition of a collective bargaining
agreement; (x) to the Company’s Knowledge, there are no Persons attempting to represent or organize or purporting to represent for
bargaining purposes any of the Current Employees; (y) since the Reference Date, there has not occurred or, to the Company’s
Knowledge, has not been threatened any strikes, slowdowns, picketing, work stoppages or concerted refusals to work or other
similar labor activities with respect to Employees; and (z) no grievance or arbitration or other proceeding arising out of or under any
collective bargaining agreement relating to any member of the Company Group is pending or, to the Company’s Knowledge, threatened;

(D) since the Reference Date, no member of the Company Group has received notice of any charge or complaint pending before the Equal Employment Opportunity Commission or similar Governmental Authority alleging unlawful discrimination in employment practices, or before the National Labor Relations Board or similar Governmental Authority alleging any unfair labor practice by such member, nor, to the Knowledge of the Company, has any such charge been threatened;

(E) (x) all Current Employees of the Company Group are employed on an at-will basis and their employment can be terminated at any time for any reason without any amounts being owed to such individual other than with respect to wages, compensation and benefits accrued before such termination; and (y) the Company Group’s relationships with all individuals who act as Consultants to any member of the Company Group can be terminated at any time for any reason without notice or any amounts being owed to such individual other than with respect to compensation or payments accrued before such termination;

(F) since the Reference Date, no member of the Company Group has effectuated: (x) a “plant closing” (as defined in the WARN Act, or any similar Law) affecting any site of employment or one or more facilities or operating units within any site of employment or facility of the Company; or (y) a “mass layoff” (as defined in the WARN Act, or any similar Law) affecting any site of employment or facility of the Company Group; and

(G) any individual performing services for the Company Group who has been classified as an independent contractor, or as an employee of some other entity whose services are leased to a member of the Company Group, has been correctly classified and is in fact not a common law employee of any member of the Company Group.

(i) Effect of Transaction. Except for the payment of the consideration under ARTICLE II or otherwise provided in this Agreement or under applicable Law, neither the execution and delivery of the Transaction Agreements nor the consummation of the Transactions shall result in (i) any payment becoming due to any Employee, (ii) the provision of any benefits or other rights to any Employee, (iii) the increase, acceleration or provision of any payments, benefits or other rights to any Employee, whether or not any such payment, right or benefit would constitute a “parachute payment” within the meaning of Section 280G of the Code, (iv) require any contributions or payments to fund any obligations under any Company Plan, or (v) the forgiveness in whole or in part of any outstanding loans made by any member of the Company Group to any Employee or Consultant. No payment, right or benefit that becomes due or accelerated as a result of the execution and delivery of the Transaction Agreements or the consummation of the Transactions is an “excess parachute payment” within the meaning of Section 280G of the Code.

(j) Compliance with Section 409A of the Code. To the extent that any Company Plan is a Nonqualified Deferred Compensation Plan, such Company Plan is in documentary and operational compliance with, in all material respects, Section 409A of the Code and all applicable guidance issued by the IRS thereunder (or could be made compliant without applicable penalties
in accordance with such guidance). No payment pursuant to any Company Plan or other arrangement to any “service provider” (as such term is defined in Section 409A of the Code and the United States Treasury Regulations and IRS guidance thereunder) to a member of the Company Group would subject any person to tax pursuant to Section 409A(1) of the Code, whether pursuant to the Transactions or otherwise. There is no Contract or arrangement to which any member of the Company Group, or to the Knowledge of the Company, any Company Affiliate is a party or by which it is bound to compensate any of its current or former employees, independent contractors or directors for additional income or excise taxes paid pursuant to Sections 409A or 4999 of the Code.

(k) **Plans Outside the United States.** No Company Plan is subject to the laws of any jurisdiction other than the United States of America.

(l) **Plan Termination.** Each Company Plan can be amended, terminated or otherwise discontinued in accordance with its terms, without Liability to any member of the Company Group, Parent or any of their Affiliates (other than ordinary administrative expenses typically incurred in a termination event). Neither the Company nor any of its respective Affiliates has announced its intention to modify or amend any Company Plan or adopt any arrangement or program which, once established, would come within the meaning of a Company Plan, and each asset held under any Company Plan may be liquidated or terminated without the imposition of any redemption fee, surrender charge or comparable Liability.

3.11 **Environmental Matters.** Each member of the Company Group is, and since the Reference Date, has been, in material compliance with all applicable Environmental Laws. There is no Action relating to or arising under Environmental Laws that is pending or, to the Knowledge of the Company, threatened against or affecting any member of the Company Group or any real property or premises currently or formerly owned, operated or leased by any member of the Company Group. No member of the Company Group has received any notice of, or entered into, or assumed by Contract or operation of Law, any obligation, liability, order, settlement, judgment, injunction or decree relating to or arising under Environmental Laws. To the Knowledge of the Company, there are no facts, circumstances or conditions existing with respect to any member of the Company Group or any real property or premises currently or formerly owned, operated or leased by any member of the Company Group or any property or facility to or at which any member of the Company Group transported or arranged for the disposal or treatment of Hazardous Materials that would reasonably be expected to result in any member of the Company Group incurring any Environmental Liability. Since the Reference Date, no member of the Company Group has stored, treated, disposed of, arranged for or permitted the disposal of, transported, handled or released any substance (including any Hazardous Materials) or owned, occupied or operated any Premises or property in a manner that has given or would be reasonably expected to give rise to any material Liabilities (including any Liabilities for response costs, corrective action costs, personal injury, natural resource damages, property damage, or any investigative, corrective or remedial obligations) pursuant to CERCLA or any other Environmental Laws. No property or facility now or, to the Knowledge of the Company, previously owned, occupied or operated by any member of the Company Group, currently is listed or proposed for listing on the National Priorities List or the Comprehensive Environmental Response, Compensation and Liability Information System, both promulgated under
CERCLA, or on any analogous state or local registry list and, to the Knowledge of the Company, no off-site location at which any member of the Company Group has disposed or arranged for the disposal of any waste is listed or proposed to be listed on the National Priorities List or on any analogous state or local list. The Company has made available to Parent a true and complete list of environmental reports, audits assessments and investigations in the Company Group’s possession or control which relate to the Premises and the real property in the Company Group’s possession or control. To the Company’s Knowledge, there have been no Releases at any real property owned or leased by the Company Group and there are no above-ground, underground, storage tanks, oil/water separators, sumps, septic systems, or polychlorinated biphenyls (PCBs) or any PCB-containing equipment located on any real property.

3.12 Contracts.

(a) Specified Material Contracts. Except as set forth in Section 3.12(a) of the Disclosure Schedule, no member of the Company Group is a party to, has any obligations, rights or benefits under, or has any of its assets or properties bound by any:

(i) Contracts that purport to limit, curtail or restrict the ability of any member of the Company Group or its respective Affiliates to conduct business in any geographic area or line of business or restrict the Persons with whom any member of the Company Group or any of its respective future Subsidiaries or Affiliates may do business;

(ii) Contracts: (x) with any Employee and any offer letters for employment or consulting with any member of the Company Group, that (A) provide for anticipated annual compensation or other payments in excess of $50,000 for any individual (other than employment offers terminable at will with no severance or acceleration liability), including any Contracts with individuals providing for any commission-based compensation in excess of such amount, or (B) provide for potential severance payments or other severance benefits; and (y) with any Consultant and any offer letters to enter into consulting agreements with any member of the Company Group, that provide for anticipated annual payments in excess of $50,000 for any individual, including any Contracts with individuals providing for any commission-based payments in excess of such amount;

(iii) Contracts with any labor union or other labor representative of Employees (including any collective bargaining agreement);

(iv) Contracts with any present or former officer, director or stockholder of any member of the Company Group, or any Affiliate of such officer, director or stockholder (other than Company Plans, but specifically including any employment agreements that are not terminable at will without severance or acceleration liability), including, but not limited to, any agreement providing for furnishing of services by, rental of assets from or to, or otherwise requiring payments to, any such officer, director, stockholder or Affiliate, in each case, other than advances or reimbursements for travel and entertainment expenses consistent with the Company Group’s policy and practice;

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(v) Contracts under which any member of the Company Group has advanced or loaned any money to any of the Employees or Affiliates of the Company Group where there is still an outstanding amount due to any member of the Company Group under such Contract, other than advances or reimbursements for travel and entertainment expenses consistent with the Company Group’s policy and past practice;

(vi) Contracts granting any power of attorney with respect to the affairs of any member of the Company Group or otherwise conferring agency or other power or authority to bind any member of the Company Group other than to officers and attorneys in the Ordinary Course of Business;

(vii) Partnership or joint venture agreements;

(viii) Contracts for the acquisition, sale or lease of properties or assets (including any ownership interest in any entity) other than in the Ordinary Course of Business;

(ix) Contracts with a Governmental Authority;

(x) Loan or credit agreements, indentures, notes or other Contracts evidencing indebtedness for borrowed money (contingent or otherwise) by any member of the Company Group, or any Contracts pursuant to which indebtedness for borrowed money (contingent or otherwise) is guaranteed by any member of the Company Group, or any guarantees of the foregoing by third parties for the benefit of any member of the Company Group;

(xi) Mortgages, pledges, security agreements, deeds of trust or other Contracts granting a Lien other than Permitted Lien on any material property or assets of any member of the Company Group;

(xii) Voting agreements or registration rights agreements relating to capital stock to which any member of the Company Group is a party;

(xiii) Lease or rental Contracts relating to personal property;

(xiv) Contracts providing for indemnification by any member of the Company Group other than (x) customary indemnities against breach of the obligations contained in such Contract that were entered into in the Ordinary Course of Business and (y) customary indemnities against infringement of Intellectual Property Rights contained in non-exclusive licenses entered into in the Ordinary Course of Business;

(xv) Any Contract with any supplier or provider of goods or services that are incorporated into, or related to the development of, any Product and Service involving consideration in excess of $25,000 in the current or either of the two (2) previous fiscal years (other than purchase orders for goods entered into in the Ordinary Course of Business);

(xvi) Any Contracts to (x) provide services to any Person involving consideration in excess of $25,000 in the current or either of the two (2) previous fiscal years, or (y) perform any service or sell or lease any product which grants the other party or any third party
“most favored nation” status, “most favored customer” pricing, preferred pricing, exclusive sales, distribution, marketing or other exclusive rights, or rights of first refusal or rights of first negotiation;

(i) Contracts relating to capital expenditures and involving obligations after the Agreement Date in excess of $25,000 and not cancelable without penalty;

(ii) Contracts relating to the disposition or acquisition of material assets or any material ownership interest in any entity;

(iii) Contracts with any Person, including any financial advisor, broker, finder, investment banker or other Person, providing advisory services to any member of the Company Group in connection with the Transactions;

(iv) Contracts (other than as set forth above) that are material to the Company Group’s Products and Services or business; and

(v) Contracts to enter into or negotiate the entering into of any of the foregoing.

(b) Documentation. The Company has delivered or made available to Parent (i) true and complete copies of each written Material Contract and (ii) a summary of each oral Material Contract, together with any and all amendments, supplements and “side letters” thereto.

(c) Status of Material Contracts. Each of the Contracts required to be listed in Section 3.12(a) of the Disclosure Schedule, each of the Real Property Leases and each of the IP Contracts (collectively, the “Material Contracts”) is valid and binding on the applicable member(s) of the Company Group and in full force and effect and is enforceable in accordance with its terms by the applicable member(s) of the Company Group. No member of the Company Group is in material breach or default under any Material Contract, nor does any condition exist that, with notice or lapse of time or both, would constitute a material breach or default in any respect thereunder by such member or that would result in material liability to any member of the Company Group. To the Knowledge of the Company, (i) no other party to any Material Contract is in default thereunder and (ii) no condition exists that with notice or lapse of time or both would constitute a default in any respect by any such other party thereunder. The Company has not received written notice of any termination or cancellation of any Material Contract, and to the Company’s Knowledge, no other party to a Material Contract has plans to terminate or cancel such Material Contract. No member of the Company Group has and, to the Knowledge of the Company, no other party to any Material Contract has repudiated any material provision of any Material Contract. No member of the Company Group is disputing and, to the Knowledge of the Company, no other party to such Material Contract is disputing, any material provision of any Material Contract. None of the parties to any Material Contract is renegotiating any amounts paid or payable to or by any member of the Company Group under such Material Contract or any other material term or provision thereof.

3.13 Assets: Title, Sufficiency, Condition. Other than with respect to Intellectual Property Rights (including any Intellectual Property Rights in Company Technology and Proprietary Software), which are addressed in Section 3.15, each member of the Company Group has good,
valid and sufficient title to or sole and exclusive leasehold interest in or adequate right to use all of its assets whether real or personal, tangible or intangible, including those that are used in the conduct of the Business or reflected in the Interim Balance Sheet as being owned by such member or acquired after the date thereof (the “Assets”), free and clear of all Liens except Permitted Liens.

The Assets constitute, in all material respects, all of the assets, properties and rights of every type and description that are used in and necessary for the conduct of the Company’s business as currently conducted. All of the material fixtures and other material improvements to the Leased Real Property and all of the Company Group’s tangible personal property (i) are in all material respects adequate and suitable for their present uses, (ii) in good working order, operating condition and state of repair (ordinary wear and tear excepted) and (iii) have been maintained in all respects in accordance with normal industry practice.

3.14 Real Property.

(a) Section 3.14(a) of the Disclosure Schedule (i) sets forth a list of the addresses of all real property leased, subleased or licensed by or for which a right to use or occupy has been granted to any member of the Company Group (the “Leased Real Property”), and (ii) identifies, with respect to each Leased Real Property, each lease, sublease, license or other Contract under which such Leased Real Property is occupied or used, including the date of and legal name of each of the parties to such lease, sublease, license or other Contract and each amendment, modification, supplement or restatement thereto (the “Real Property Leases”).

(b) No member of the Company Group owns, or has ever owned, any real property.

(c) There are no written or oral leases, subleases, licenses, concessions, occupancy agreements or other Contracts from any member of the Company Group granting to any other Person the right to use or occupancy of any of the Leased Real Property and there is no Person (other than the applicable member of the Company Group) in possession of any of the Leased Real Property.

(d) The Company has made available to Parent true, accurate and complete copies of the Real Property Leases, in each case as amended or otherwise modified and in effect, together with any extension notices, notices or memoranda of lease, estoppel certificates and subordination, non-disturbance and attornment agreements related thereto and no Real Property Lease has been modified in any material respect, except to the extent that such modifications are disclosed by the copies delivered to Parent prior to Closing. With respect to each of the Real Property Leases, (i) the applicable member of the Company Group has a valid and enforceable leasehold interest in each parcel or tract of real property leased by it, free and clear of all Liens (including liens arising out of any attachment, judgement or execution) affecting the Leased Real Property or the leasehold estate or interest created by the Real Property Leases except for the Permitted Liens; (ii) there are no existing material defaults thereunder by the applicable member of the Company Group or, to the Knowledge of the Company, any other party to the Real Property Leases; (iii) no event has occurred which (with notice, lapse of time or both) would constitute a material breach or default thereunder by the applicable member of the Company Group or, to the Knowledge of the Company, any other party to the Real Property Leases, or that could permit the termination,
modification, or acceleration of rent thereunder; (iv) there are no pending actions or proceedings that were brought by the applicable member of the Company Group against a lessor under a Real Property Lease alleging that such lessor is in default or has committed a breach under such Real Property Lease; (v) no member of the Company Group has received any written notice from any Governmental Authority of a violation of any governmental requirements (including Environmental Laws) with respect to any of the Leased Real Property and to the Company’s Knowledge, the Leased Real Property is not in violation of any material requirements of same; and (vi) no member of the Company Group has used, generated, stored, released, discharged, transported, handled, or disposed of any hazardous materials on, in or in connection with any parcel of Leased Real Property except as expressly permitted pursuant to the terms of the Real Property Leases.

(c) To the Company’s Knowledge, no eminent domain, condemnation or zoning, building code or other moratorium Action is pending or threatened, that would preclude or materially impair the use of any Leased Real Property. None of the Company Group’s current uses of the Leased Real Property violates in any respect any restrictive covenant or zoning ordinance that affects any of the Leased Real Property. To the Company’s Knowledge, there have been no special assessments filed or proposed against the Leased Real Property or any portion thereof. None of the Leased Real Property has been damaged or destroyed by fire or other casualty that has not been restored. All Premises are supplied with utilities necessary for the operation of such Premises as the same are currently operated or currently proposed to be operated, all of which utilities are provided via public roads or via irrevocable appurtenant easements benefitting the parcel of Leased Real Property on which such Premises is located, in each case, to the extent necessary for the conduct of the Company Group’s business.

3.15 Intellectual Property; Technology; Privacy and Security; Information Systems; Disaster Recovery.


(i) The Company Group owns or has the right to use all Company Technology (and all Intellectual Property Rights therein) used in the Company Group’s business for all purposes necessary to or used in the Company Group’s business as presently conducted. Except for (x) the Technology and Intellectual Property Rights licensed to a member of the Company Group under the Inbound IP Contracts, (y) Public Software and (z) Software and other Intellectual Property Rights used under off the shelf, “click wrap,” “shrink wrap” or similar non-negotiated license agreements that are generally commercially available to the public on reasonable terms (“Shrink Wrap Licenses”), in each case with annual, aggregate payments (including license, maintenance and support fees) not in excess of $20,000 individually or $50,000 in the aggregate, none of the Company Technology or Company Intellectual Property Rights is owned by any third party. The Company Group exclusively owns all Company Technology, including Proprietary Software and all Company Intellectual Property Rights, in each case, that are owned or purported to be owned by the Company Group free and clear of all Liens other than Permitted Liens.

(ii) Section 3.15(a)(ii) of the Disclosure Schedule contains a list of Proprietary Software. Except as disclosed in Section 3.15(a)(ii) of the Disclosure Schedule: (A) the Company Group has used commercially reasonable efforts to maintain and protect all Proprietary
Software (including all source code and system specifications) with appropriate proprietary notices, confidentiality and non-disclosure agreements and such other measures as are reasonably necessary to protect the Intellectual Property Rights therein, and none of the source code of any Proprietary Software has been published, disclosed or delivered to any Person by any member of the Company Group (other than those subcontractors listed on Section 3.15(a)(ii) of the Disclosure Schedule) or by any employee, consultant, contractor or agent of any member of the Company Group; (B) no licenses or rights (including contingent rights) have been granted by any member of the Company Group, or any of its respective Affiliates, to any Person to access, use or distribute any source code of any Proprietary Software; (C) the Company Group has complete and exclusive right, title and interest in and to all Proprietary Software; (D) the Company Group has developed the Proprietary Software through its own efforts and for its own account without the aid or use of any consultants, agents, independent contractors or Persons (other than Persons that are Employees); (E) the Company owns or otherwise has the right to use the current source code, system documentation, statements of principles of operation and schematics, as well as any pertinent commentary, explanation, program (including compilers), workbenches, tools and higher level (or “proprietary”) language actually created, owned or used by the Company Group for the development, maintenance and implementation of the Proprietary Software; and (F) there are no Contracts in effect with respect to the marketing, distribution or licensing of the Proprietary Software by any other Person.

(b) Infringement. Neither the operation of the Business of any member of the Company Group as presently conducted nor any of the Products and Services or Company Technology has infringed upon, diluted, misappropriated or violated, or will (in each case, solely for clarity, as they presently exist) infringe upon, dilute, misappropriate or violate, any Intellectual Property Rights of any Person. No member of the Company Group has (x) received any written charge, complaint, claim, demand, or notice from a Person alleging infringement, dilution, misappropriation or violation of the Intellectual Property Rights of such Person (including any demand to refrain from using or to license any Intellectual Property Rights of any Person in connection with the conduct of the Company Group’s business) or (y) has any contractual obligation to indemnify any Person for or against any interference, infringement, dilution, misappropriation or violation with respect to any Intellectual Property Rights. To the Company’s Knowledge, no Person has infringed upon, diluted, misappropriated or violated any Company Intellectual Property Rights at any time since the Reference Date. There are no pending or, to the Company’s Knowledge, threatened claims against any member of the Company Group challenging any member of the Company Group’s ownership of the owned Company Intellectual Property Rights or alleging that any of the Company Intellectual Property Rights are invalid or unenforceable.

(c) Scheduled IP. Section 3.15(c) of the Disclosure Schedule identifies all patents, patent applications, registered trademarks and registered copyrights, applications for trademark and copyright registrations, domain names, registered design rights and other forms of registered Intellectual Property Rights and applications therefor owned by or exclusively licensed to any member of the Company Group (collectively, the “Company Registrations”). All current Company Registrations have been duly maintained (including the payment of fees) and have not expired, or been cancelled or abandoned. Section 3.15(c) of the Disclosure Schedule identifies each trade name and each unregistered trademark, service mark, or trade dress owned or exclusively

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licensed by any member of the Company Group that, in each case, is material to the Business of the Company Group.

(d) **IP Contracts.** Section 3.15(d) of the Disclosure Schedule identifies under separate headings each Contract (A) under which any member of the Company Group uses or licenses from a third party any Company Technology or Company Intellectual Property Rights that is material to the operation of the Business of any member of the Company Group as presently conducted and that any Person besides the members of Company Group owns, including any Software (other than Proprietary Software, Software used under Shrink Wrap Licenses or Public Software) that is licensed to or used by a member of the Company Group or any of its Affiliates and that is material to Company Group’s Business (“Third Party Software”) (other than Shrink Wrap Licenses and Public Software) (collectively “Inbound IP Contracts”) or (B) under which any member of the Company Group has granted any Person any right or interest in Company Intellectual Property Rights including any right to use or access any item of the Company Technology (other than non-disclosure agreements between a Company Group member and a Person for the purpose of exchanging confidential information and agreements between a Company Group member and any of its employees, consultants or subcontractors) (the “Outbound IP Contracts,” and together with the Inbound IP Contracts, the “IP Contracts”). None of the Inbound IP Contracts or Shrink Wrap Licenses are subject to any transfer, assignment or change of control limitations. Except as provided in the Inbound IP Contracts, Public Software and Shrink Wrap Licenses, no member of the Company Group owes any royalties or other payments or otherwise has any liability to any Person for the use of any Company Intellectual Property Rights or Company Technology. Each member of the Company Group has, as applicable, paid all fees, royalties and other payments applicable to the past and current use or exploitation of Intellectual Property Rights provided for by the Inbound IP Contracts and Shrink Wrap Licenses, and no fees, royalties or other payments provided by the Inbound IP Contracts and Shrink Wrap Licenses are due or otherwise required to be paid by any member of the Company Group or any of its Affiliates within thirty (30) days following the Closing Date or otherwise become due as a result of, or attributable to, the Transactions contemplated herein.

(e) **Confidentiality and Invention Assignments.** Each member of the Company Group has maintained commercially reasonable practices designed to ensure the protection of the confidentiality of the Company Group’s confidential information and trade secrets and has required any Employee, Consultant or third party with access, or to whom it has disclosed its confidential information, to execute contracts requiring them to maintain the confidentiality of such information and use such information only in accordance with such contracts. All Employees and Consultants of the Company Group who (i) in the normal course of their duties are involved in the creation of any Company Technology that is incorporated in any Product and Service of the Company Group or (ii) have in fact created Company Technology that is incorporated in any Product and Service of the Company Group, have executed contracts that irrevocably assign to the applicable member of the Company Group on a worldwide royalty-free basis all of such Persons’ respective rights in and to such Company Technology, including all Intellectual Property Rights therein, relating to such Product and Service (each, an “IP Assignment”). To the Knowledge of the Company, no Employee or Consultant is in violation of any term of any such IP Assignment signed by such Employee or Consultant with a member of the Company Group. All authors of any works of authorship in the
Company Technology have waived their moral rights and have agreed to a covenant not to assert their moral rights, in each case, to the extent permitted by applicable Law or such authors prepared such works in jurisdictions that do not recognize moral rights.

(f) Open Source Software. Except as disclosed on Section 3.15(f) of the Disclosure Schedule: (i) none of the Company Technology, Proprietary Software, or any Product and Service of the Company Group (including any software, middleware, firmware) constitutes, contains, or is dependent upon any Public Software (ii) none of the source code of the Proprietary Software has ever been provided, delivered or distributed to any Person other than those Employees and Consultants of the Company Group working on the development of Company Group’s software, firmware or middleware for the benefit of a member of the Company Group and has never been delivered or distributed in any form (object code, executable code or source code form) to any Person, including delivery via electronic transmission, by physical delivery on tangible media (either as stand-alone software or as a part of any other software), or delivery or transmission as part of the transfer of hardware, temporarily or permanently. None of the Company Technology, Proprietary Software, nor any Product and Service of the Company Group is subject to any Contract that would require any member of the Company Group to publicly divulge any source code or trade secret that is part of the Company Technology.

(g) Privacy and Data Security.

(i) The Collection and Use and dissemination by each member of the Company Group of any Personal Data is in compliance in all respects with all Information Privacy and Security Laws, all applicable Personal Data Obligations and all Contracts that pertain to the Collection and Use of Personal Data to which such member of the Company Group is bound. Except as disclosed on Section 3.15(g) of the Disclosure Schedule, (x) no Personal Data is stored or otherwise maintained outside the United States by any member of the Company Group or any third party and (y) no member of the Company Group has engaged in cross-border processing of Personal Data; except to the extent permitted under and in compliance with Information Privacy and Security Laws. True and complete copies of all privacy policies that have been used by any member of the Company Group since the Reference Date have been provided or made available to Parent. Each member of the Company Group has since the Reference Date consistently posted a privacy policy in conformance with all Information Privacy and Security Laws on all websites and any mobile applications owned or operated by such member.

(ii) Each member of the Company Group maintains policies and procedures regarding data security and privacy and maintains administrative, technical and physical safeguards that are commercially reasonable and, in any event, comply in material respects with all Information Privacy and Security Laws and all Contracts to which such member of the Company Group is bound.

(iii) Since the Reference Date, (w) there have been no security breaches relating to, or violations of any security policy or Information Privacy and Security Law resulting in any unauthorized access, disclosure, or use of, any Personal Data maintained by or on behalf of the Company (any such incident, a “Security Breach”), (x) no notice has been provided to any member of the Company Group by a third party vendor or, to the Knowledge of the Company, any
other Person of a Security Breach, (y) the Company has not provided notice to any Governmental Authority or parties to any Contract under any applicable Law of a Security Breach since the Reference Date, and (z) no Person (including any Governmental Authority) has commenced any Action alleging in writing that the Company’s information privacy or data security practices are not compliant with Information Privacy and Security Laws, or to the Knowledge of the Company, threatened any such Action or made any complaint, investigation, or inquiry alleging non-compliance with Information Privacy and Security Laws.

(iv) No member of the Company Group (x) has or solicits any customers in the European Economic Area, or (y) processes, transmits, or stores any Personal Data of any Persons that reside in the European Economic Area.

(v) Each member of the Company Group takes commercially reasonable steps to limit access to Personal Data to: (x) those Company Group personnel and third-party vendors providing services to or on behalf of the Company Group who are authorized based on principles of least privilege and (y) such other Persons permitted to access such Personal Data in accordance with the privacy policies and terms of use, all Information Privacy and Security Laws, and all Contracts to which such member of the Company Group is bound.

(vi) The Company’s information security program is comprised of administrative, technical and physical safeguards compliant in all respects with all Information Privacy and Security Laws (collectively, the “Security Program”). The Security Program employs commercially reasonable measures designed to: (v) protect the integrity and confidentiality of Personal Data; (w) protect against reasonably anticipated threats or hazards to the security of Personal Data; (x) protect against the unauthorized access, disclosure or use of Personal Data; (y) address computer and network security; and (z) provide for the secure destruction and disposal of Personal Data. The Security Program is regularly reviewed and, as needed, updated in accordance with all Information Privacy and Security Laws. With respect to third party vendors or persons with access to Personal Data, an applicable member of the Company Group has entered into contracts or written agreements with such parties requiring that such vendors or persons maintain an appropriate security program.

(vii) Each member of the Company Group controls the access to its computer and information technology networks through the utilization of commercially reasonable measures that are designed to prevent unauthorized access to such networks. All of the Company Group’s security measures are designed to be consistent with or exceed industry standards and the requirements of applicable Laws and are designed to (x) prevent the unauthorized disclosure of confidential information (including Personal Data) of the applicable member of the Company Group, (y) prevent access without express authorization (and immediately terminate such unauthorized access) to the networks and information system of the applicable member of the Company Group and (z) facilitate the applicable member of the Company Group’s identification of the person making or attempting to make such unauthorized access.

(h) Effect of Transactions on Company Technology Rights or Data Privacy. The Transactions (including the Mergers) shall not adversely affect any member of the Company Group’s ownership of any Company Technology or Company Intellectual Property Rights, or any member
of the Company Group’s legal right and ability to continue using the Company Technology or Company Intellectual Property Rights in the operation of such member’s business on or after the Closing to the same extent as the Company Technology or Company Intellectual Property Rights are used in the operation of the business immediately prior to the Closing. The Transactions (including any transfer of Personal Data resulting from the Transactions) (i) comply with all Personal Data Obligations of the applicable member of the Company Group, and (ii) comply (and the disclosure to and transfer to Parent of such Personal Data at the Closing, and the use by Parent of such Personal Data at and after the Closing in the same manner as such Personal Data is used by the applicable member of the Company Group prior to the Closing, will comply) with all applicable Information Privacy and Security Laws (including any such Laws and regulations in the jurisdictions where the Personal Data is collected to the extent such laws are applicable to the Company Group).

(i) Information Systems. In the last twelve (12) months there have been no failures, breakdowns, outages or unavailability of the Information Systems necessary for the operation of the Business as conducted prior to the Closing and the DR Plans were not activated other than for testing purposes. On and after the Closing, the Information Systems necessary for the operation of the Business shall be in the possession, custody or control of the Company Group, along with all tools and documentation necessary for the operation thereof, as existing immediately prior to the Closing.

(j) Disaster Recovery. The Company has delivered or made available to Parent a true and complete copy of the DR Plans. To the Knowledge of the Company, the DR Plans are consistent with or exceed industry standards and applicable Laws. The DR Plans are designed to ensure, at a minimum, the ability of each member of the Company Group to resume operations and performance of services promptly and ensure redundancy of all data and information material to the operation of the Company Group that any member of the Company Group is required to maintain pursuant to any Contract, internal policy or applicable Law. The Company Group has conducted “tabletop” testing of the DR Plans not less frequently than annually (and in any event, upon a material change to the DR Plans) and corrected any deficiencies in the DR Plans or deficiencies in compliance with the DR Plans.

3.16 Insurance. Section 3.16 of the Disclosure Schedule sets forth a list of all policies of insurance issued to each member of the Company Group that are currently in effect and all pending claims against such insurance policies. The Company has delivered or made available to Parent complete and correct copies of all such policies, together with all endorsements, riders and amendments thereto. There are no disputes with the insurers of any such policies or any claims pending under such policies as to which the insurers have denied coverage or reserved the right to deny coverage. Each such policy is in full force and effect, all premiums that are due and payable under all such policies have been paid or accrued, the Company Group is otherwise in compliance in all material respects with the terms of such policies, and the Transactions (including the Mergers) shall not result in any termination of, or otherwise adversely affect, any such policy. To the Knowledge of the Company, no member of the Company Group has failed to give proper notice of any claim under any such policy in a valid and timely fashion. No member of the Company Group has received any notice of non-renewal, cancellation or termination of any insurance policy in effect on the Agreement Date or at any time since the Reference Date.
3.17 **Related Party/Affiliate Transactions.** There are no Liabilities of any member of the Company Group to any Related Party other than ordinary course Employee- and director-related compensation and reimbursement Liabilities. No Related Party has any interest in any property (real, personal or mixed, tangible or intangible) used by any member of the Company Group in the conduct of its business. The Company is not subject to any ongoing transactions pursuant to which the Company purchases any services, products or Technology from, or sells or furnishes any services, products or Technology to, any Related Party. Since the Reference Date, all transactions pursuant to which any Related Party has purchased any services, products or Technology from, or sold or furnished any services, products or technology to, any member of the Company Group have been on an arm’s-length basis on terms no less favorable to the applicable member than would be available from an unaffiliated party.

3.18 **Suppliers.** Section 3.18 of the Disclosure Schedule sets forth true and complete lists of the top ten suppliers of the Company Group (measured in terms of total expenses) attributable to each such Person during the year ended December 31, 2019 (each Person identified on at least one of such lists, a “**Top Supplier**”), showing the total purchases by each member of the Company Group from each such Top Supplier during such period. Since the Balance Sheet Date, no Top Supplier has (x) ceased or materially reduced its sales or provision of services to any member of the Company Group or changed the pricing or other terms of the business it does with any member of the Company Group, or (y) to the Knowledge of the Company, threatened to cease or materially reduce such sales or provision of services, other than in the Ordinary Course of Business. No Top Supplier has pending or, to the Company’s Knowledge, has any reasonable basis to threaten, any Action against any member of the Company Group.

3.19 **Certain Business Practices.** Since the Reference Date, neither the Company Group nor any Employee or, to the Company’s Knowledge, any agent, acting on behalf of the Company Group, has (i) used any Company Group funds for unlawful contributions, gifts, entertainment or other unlawful payments relating to political activity, (ii) made any unlawful payment to any foreign or domestic government official or employee or to any foreign or domestic political party or campaign or violated any provision of the Foreign Corrupt Practices Act of 1977, as amended, (iii) consummated any transaction, made any payment, entered into any Contract or arrangement or taken any other action in violation of Section 1128B(b) of the Social Security Act, as amended, or (iv) made any other unlawful payment of a type similar to those described above in this Section 3.19.

3.20 **Brokers and Other Advisors.** No broker, investment banker, financial advisor or other Person is entitled to any broker’s, finder’s, financial advisor’s or other similar fee or commission, or the reimbursement of expenses, in connection with the Transactions or any prior actual or potential merger, acquisition or divestiture transaction based upon arrangements made by or on behalf of any member of the Company Group or any of its respective Affiliates. Notwithstanding anything in this Agreement to the contrary, there are no fees or expenses related to the Transactions payable by any member of the Company Group to any third party other than the Company Transaction and Bonus Expenses.
3.21 **Disclaimer of Other Warranties.** Except for the representations and warranties contained in this ARTICLE III (including the Disclosure Schedule), neither the Company nor any other Person on behalf of the Company has made, or shall be deemed to have made, any other express or implied representation or warranty, whether written or oral, with respect to any member of the Company Group or with respect to any other information provided or made available to Parent, Merger Sub A and Merger Sub B or any of their respective Representatives, and the Company hereby disclaims any other representations or warranties, whether made by the Company Group (or any member thereof) or any of their respective Affiliates, officers, directors, employees, agents, stockholders or representatives.

**ARTICLE IV**

**REPRESENTATIONS AND WARRANTIES OF PARENT, MERGER SUB A AND MERGER SUB B**

Parent, Merger Sub A and Merger Sub B represent and warrant to the Company as of the Agreement Date and as of the Closing Date as follows:

4.1 **Organization.** Each of Parent and Merger Sub A is a corporation duly incorporated, validly existing and in good standing under the Laws of the State of Delaware. Merger Sub B is a limited liability company duly formed, validly existing and in good standing under the Laws of the State of Delaware. Since the date of its incorporation or formation, as applicable, neither Merger Sub A nor Merger Sub B (i) has held, nor does it hold, any material assets or material liabilities nor (ii) has been engaged in any activities other than in connection with or as contemplated by this Agreement. Since the date of its formation, Merger Sub B has been classified for all U.S. federal and applicable state and local tax purposes as an entity that is disregarded as an entity separate from Parent (within the meaning of Treasury Regulations Section 301.7701-3).

4.2 **Authority; Non-Contravention.**

(a) Each of Parent, Merger Sub A and Merger Sub B has all requisite corporate power and corporate authority to execute and deliver this Agreement and the Transaction Agreements to which it is a party and to perform its obligations hereunder and thereunder and to consummate the Transactions (including the Mergers). The execution, delivery and performance by each of Parent, Merger Sub A and Merger Sub B of the Transaction Agreements to which it is a party and the consummation by Parent, Merger Sub A and Merger Sub B of this Agreement and the Transactions (including the Mergers) have been duly authorized and approved by Parent’s, Merger Sub A’s and Merger Sub B’s respective board of directors or board of managers, as applicable, and no other corporate action on the part of Parent, Merger Sub A or Merger Sub B is necessary to authorize the execution, delivery and performance by each of Parent, Merger Sub A and Merger Sub B of this Agreement and the Transaction Agreements to which it is a party and the consummation by it of the Transactions (including the Mergers). This Agreement has been and, when executed and delivered, the other Transaction Agreements to which each of Parent, Merger Sub A and Merger Sub B is a party shall be, duly executed and delivered by Parent, Merger Sub A and Merger Sub B.
Assuming due authorization, execution and delivery hereof and thereof by the other parties hereto and thereto, this Agreement constitutes and the other Transaction Agreements to which each of Parent, Merger Sub A and Merger Sub B is a party shall, when delivered at the Closing, constitute, the legal, valid and binding obligations of Parent, Merger Sub A and Merger Sub B, enforceable against Parent, Merger Sub A and Merger Sub B in accordance with their respective terms, except to the extent that their enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors’ rights generally and by general equitable principles.

(b) Neither the execution and delivery of this Agreement, the Transaction Agreements to which each of Parent, Merger Sub A and Merger Sub B is a party, nor the consummation by Parent, Merger Sub A and Merger Sub B of the Transactions (including the Mergers), nor compliance by Parent, Merger Sub A and Merger Sub B with any of the terms or provisions thereof, shall (i) violate or conflict with or result in any default under (with or without notice or lapse of time, or both) any provision of the Charter Documents of Parent, Merger Sub A and Merger Sub B or (ii) assuming that the consents and approvals referred to in Section 4.3 are obtained and the filings referred to in Section 4.3 are made, (x) violate any Law applicable to Parent, Merger Sub A or Merger Sub B or any of their respective properties or assets, or (y) constitute a default under (with or without notice or lapse of time, or both), give rise to a right of termination, cancellation modification or acceleration of any obligation or loss of any benefit under, or result in the creation of any Lien upon any of the respective properties or assets of Parent, Merger Sub A and Merger Sub B under, any of the terms, conditions or provisions of any material Contract to which Parent, Merger Sub A and Merger Sub B is a party, except for such violations, losses, defaults, terminations, cancellations, accelerations or Liens as, individually or in the aggregate, would not result in a Parent Material Adverse Effect.

4.3 Governmental Approvals. No consent, approval or authorization of, or registration, qualification or filing with, any Governmental Authority is required for the valid execution, delivery and performance of this Agreement or the other Transaction Agreements by Parent, Merger Sub A and Merger Sub B or the consummation by Parent, Merger Sub A and Merger Sub B of the transactions contemplated hereby, except for (i) a filing with the New York Stock Exchange in respect of the shares of Parent Common Stock issuable pursuant to this Agreement, (ii) the filing of the Certificates of Merger with the Secretary of State of the State of Delaware pursuant to the DGCL and the DLLCA, as applicable, and (iii) such consents, approvals, orders, authorizations, registrations, declarations and filings as may be required under applicable federal or state securities laws.

4.4 SEC Documents.

(a) Parent has filed or furnished all reports, schedules, forms, proxy statements, prospectuses, registration statements and other documents required to be filed or furnished by it with the SEC since January 1, 2018, and Parent has made available to the Company (including through the SEC’s EDGAR database) true, correct and complete copies of all such documents (collectively, “Parent’s SEC Documents”). As of their respective dates (or, if amended or supplemented, as of the date of the most recent amendment or supplement), each of Parent’s SEC
Documents complied in all material respects with the applicable requirements of the Securities Exchange Act of 1934, as amended (the “1934 Act”), the Securities Act and the Sarbanes-Oxley Act of 2002, and any rules and regulations promulgated thereunder, and none of Parent’s SEC Documents, as of their respective dates, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading.

(b) Each of the consolidated financial statements (including, in each case, any notes thereto) contained in Parent’s SEC Documents was prepared in accordance with GAAP throughout the periods indicated (except as may be indicated in the notes thereto and except that financial statements included with interim reports do not contain all notes to such financial statements) and each fairly presented in all material respects the consolidated financial position, results of operations and changes in stockholders’ equity and cash flows of Parent and its consolidated subsidiaries as at the respective dates thereof and for the respective periods indicated therein (subject, in the case of unaudited statements, to normal year-end adjustments which are not expected, individually or in the aggregate, to be material).

4.5 Shares of Common Stock. The shares of Parent Common Stock to be issued and delivered to the Consenting Holders that are Accredited Investors in accordance with this Agreement, when so issued and delivered, will be (i) duly authorized, validly issued, fully paid and nonassessable and not subject to preemptive, subscription or similar rights, and (ii) based in part upon the statements of such Consenting Holders in the Written Consent and Joinder Agreements or Support Agreements, as applicable, issued pursuant to available and valid exemptions from the registration and qualification provisions of applicable federal and state securities laws.

4.6 Availability of Funds. On the Closing Date and through the Second Indemnification Hold-Back Payment Date (or such later date as all disputes are resolved if Parent exercises its Offset Right), Parent will have sufficient cash or other sources of immediately available funds to enable Parent to consummate on a timely basis the Transactions (including the Mergers) including the payment of all of its cash obligation due under this Agreement. Parent understands and acknowledges that under the terms of this Agreement, Parent’s obligation to consummate the Transactions is not in any way contingent upon or otherwise subject to Parent’s consummation of any financing arrangements, Parent’s obtaining of any financing or the availability, grant, provision or extension of any financing to Parent.

4.7 No Reliance. Parent, Merger Sub A and Merger Sub B acknowledge and agree that (except for the representations and warranties contained in ARTICLE III including the Disclosure Schedule), neither the Company nor any other Person on behalf of the Company makes, and neither Parent, Merger Sub A nor Merger Sub B has relied upon, any other express or implied representation or warranty, whether written or oral, with respect to the Company Group or with respect to any other information provided or made available to Parent, Merger Sub A or Merger Sub B or any of their respective Representatives, and that the Company hereby disclaims any other representations or warranties, whether made by the Company or any of its Affiliates, officers, directors, employees, agents, stockholders or representatives.
ARTICLE V

CERTAIN AGREEMENTS OF THE PARTIES

5.1 Conduct of the Business. Except as expressly permitted by this Agreement, or with the prior written consent of Parent (not to be unreasonably withheld, conditioned or delayed) or as required by applicable Law, from the Agreement Date until the Closing or the earlier termination of this Agreement pursuant to ARTICLE VII (Termination), the Company Group shall (i) conduct its business in the Ordinary Course of Business and in compliance with all applicable Laws, (ii) use commercially reasonable efforts to maintain and preserve intact its present business organization and the goodwill of those having business relationships with it (including by using commercially reasonable efforts to maintain the value of its assets and technology and preserve its relationships with Employees, suppliers, strategic partners, licensors, licensees, regulators, landlords and others having business relationships with any member of the Company Group) and retain the services of its present officers, directors and Employees (other than any termination for cause) and (iii) make no changes to or otherwise allow to lapse the insurance policies described in Section 3.16. Without limiting the generality of the foregoing, except as expressly permitted by this Agreement, or with the prior written consent of Parent (not to be unreasonably withheld, conditioned or delayed), as set forth in Section 5.1 of the Disclosure Schedule or as required by applicable Law, until the Closing, no member of the Company Group shall:

(a) issue, sell, grant, dispose of, amend any term of, grant registration rights with respect to, pledge or otherwise encumber any shares of its capital stock or other equity interests, or any securities or rights convertible into, exchangeable or exercisable for, or evidencing the right to subscribe for any shares of its capital stock or other equity interests, or any rights, warrants, options, calls, commitments or any other agreements of any character to purchase or acquire any shares of its capital stock or other equity interests or any securities or rights convertible into, exchangeable or exercisable for, or evidencing the right to subscribe for, any shares of its capital stock or other equity interests; provided, however, that the Company may issue shares of Company Stock upon the exercise of Company Options that are outstanding on the Agreement Date and upon conversion of the Company Notes, in each case in accordance with the terms thereof;

(b) other than as contemplated by the terms of this Agreement, amend (including by reducing an exercise price or extending a term) or waive any of its rights under, or accelerate the vesting under, any provision of the Company Option Plan or any agreement evidencing any outstanding stock option, warrant or other right to acquire capital stock of the Company or any restricted stock purchase agreement or any similar or related contract;

(c) redeem, purchase or otherwise acquire or cancel any of its outstanding shares of capital stock or equity interests, or any rights, warrants, options, calls, commitments or any other agreements of any character to acquire any shares of its capital stock or equity interests;

(d) declare, set aside funds for the payment of or pay any dividend on, or make any other distribution (whether in cash, stock or property) in respect of, any shares of its capital stock or other equity interests or make any payments to the Holders in their capacity as stockholders of the Company;
(e) split, combine, subdivide, reclassify or take any similar action with respect to any shares of the Company’s capital stock;

(f) form any Subsidiary;

(g) incur, guarantee, issue, sell, repurchase, prepay or assume any (i) Company Debt, or issue or sell any options, warrants, calls or other rights to acquire any debt securities of any member of the Company Group; (ii) obligations of any member of the Company Group issued or assumed as the deferred purchase price of property; (iii) conditional sale obligations of any member of the Company Group; (iv) obligations of any member of the Company Group under any title retention agreement (but excluding trade accounts payable and other accrued current liabilities arising in the Ordinary Course of Business); (v) obligations of any member of the Company Group for the reimbursement of any obligor on any letter of credit; or (vi) obligations of the type referred to in clauses (i) through (vi) of other Persons for the payment of which any member of the Company Group is responsible or liable, directly or indirectly, as obligor, guarantor, surety or otherwise, including guarantees of such obligations;

(h) sell, transfer, lease, license, mortgage, encumber or otherwise dispose of or subject to any Lien other than a Permitted Lien (including pursuant to a sale-leaseback transaction or an asset securitization transaction), any of its properties or assets other than the granting of non-exclusive licenses to customers in the Ordinary Course of Business;

(i) make any capital expenditures in excess of $50,000 in the aggregate;

(j) acquire or agree to acquire in any manner (whether by merger or consolidation, the purchase of an equity interest in or a material portion of the assets of or otherwise) any business or any corporation, partnership, association or other business organization or division thereof other than the acquisition of inventory and equipment in the Ordinary Course of Business;

(k) make any investment (by contribution to capital, property transfers, purchase of securities or otherwise) in, or loan or advance funds to any Person (other than travel and similar advances to its Employees in the Ordinary Course of Business in an aggregate amount at any one time of not more than $2,500);

(l) with respect to Contracts, (i) enter into, adopt, terminate, modify, renew or amend (including by accelerating material rights or benefits under) any Material Contract (or any Contract that would constitute a Material Contract if in effect on the Agreement Date) other than in the Ordinary Course of Business, (ii) enter into or extend the term or scope of any Contract that purports to restrict any member of the Company Group, or any current or future Subsidiary of any member of the Company Group, from engaging in any line of business or in any geographic area, (iii) enter into any Contract that could be breached by, or require the consent of any third party in order to continue in full force following, consummation of the Transactions, or (iv) release any Person from, or modify or waive any material provision of, any confidentiality or non-disclosure agreement;
(m) (i) hire or terminate any employees, except for the termination of any employee for legitimate business purposes, (ii) increase the annual level of compensation payable or to become payable by any member of the Company Group to any of its directors or Current Employees, (iii) grant any bonus, benefit or other direct or indirect compensation to any director, Current Employee or Current Consultant other than in the Ordinary Course of Business, except as required by the terms of this Agreement, (iv) increase the coverage or benefits available under or otherwise modify or amend or terminate any (or create any new) Company Plan, except as required by the terms of this Agreement, applicable Law or by the terms of any Company Plan, (v) enter into any employment, deferred compensation, severance, consulting, non-competition or similar agreement to which any member of the Company Group is a party (or amend any such agreement in any respect) or enter into any agreement involving a Current Employee or Current Consultant, except, in each case, as required by the terms of this Agreement, applicable Law from time to time in effect or by the terms of any Company Plan or (vi) enter into any transactions pursuant to which any Related Party purchases any services, products or technology from, or sells or furnishes any services, products or technology to, any member of the Company Group;

(n) make, change or revoke any election concerning Taxes or Tax Returns that would be inconsistent with past practice, file any amended Tax Return other than consistent with past practice, enter into any closing agreement or Contract with any Taxing Authority with respect to Taxes, settle any Tax claim or assessment (other than by paying Taxes in the Ordinary Course of Business), surrender any right to claim a refund of Taxes, request any Tax ruling or agree to an extension or waiver of the statute of limitations with respect to the assessment or determination of Taxes (other than an extension automatically granted);

(o) make any changes in financial accounting methods, principles or practices (or change an annual accounting period), except as required by applicable Law;

(p) amend the Company Charter Documents;

(q) adopt a plan or agreement for or carry out any complete or partial liquidation, dissolution, restructuring, recapitalization, merger, consolidation or other reorganization other than as required by the provisions of the Transaction Agreements;

(r) pay, repurchase, prepay, discharge, settle or satisfy any claim, liability or obligation (absolute, accrued, asserted or unasserted, contingent or otherwise) in excess of $10,000 in any one instance or $25,000 in the aggregate, other than the payment, discharge, settlement or satisfaction in accordance with the terms of the Liabilities reflected in the Balance Sheet or Interim Balance Sheet;

(s) initiate, settle, agree to settle, waive or compromise any Action;

(t) accelerate, beyond the normal collection cycle, collection of accounts receivable or delay beyond normal payment terms payment of any accounts payable;

(u) accelerate or defer the construction of any premises;
(v) accelerate or defer the purchase of fixtures, equipment, leasehold improvements or other capital expenditures;

(w) grant or agree to grant any license to any of the Company Group’s Intellectual Property Rights other than in the Ordinary Course of Business;

(x) hire, appoint or, except as required by the terms of this Agreement, terminate any director or officer of any member of the Company Group (other than a termination for cause);

(y) enter into any lease (either as lessor or lessee) or other form of use or occupancy agreement for the use or occupancy of any real property or amend, in any respect, or terminate any of the Real Property Leases; or

(z) obligate any member of the Company Group to take any of the foregoing actions.

Nothing contained in this Agreement shall give Parent, Merger Sub A or Merger Sub B, directly or indirectly, rights to control any operations of any member of the Company Group prior to the Closing.

5.2 Stockholder and Other Holder Approvals. As promptly as practicable after the execution of this Agreement, the Company shall, in accordance with its Charter Documents and applicable Law, provide to the Holders an Information Statement and other appropriate documents in connection with the obtaining of written consents of the Holders in favor of the adoption of this Agreement and the approval of the Transactions (including the Mergers). The Information Statement shall include the unanimous recommendation of the board of directors of the Company (subject to any recusal by a director for actual or potential conflicts of interest) in favor of the adoption of this Agreement and the approval of the Transactions (including the Mergers). Notwithstanding anything to the contrary contained in this Agreement, the Information Statement and any other materials submitted to the Holders in connection with this Agreement and the Transactions shall be subject to prior review and reasonable approval by Parent. The Company shall use its commercially reasonable efforts to obtain (i) Written Consent and Joinder Agreements from all Holders (other than Holders that have signed Support Agreements) and (ii) approval by the Requisite Stockholder Approval of the adoption of this Agreement as well as the consummation of the Transactions (including the Mergers).

5.3 Commercially Reasonable Efforts.

(a) Actions Required to Consummate Transactions. Subject to the terms and conditions of this Agreement, from the Agreement Date until the Closing Date or the earlier termination of this Agreement pursuant to ARTICLE VII (Termination), each of the Parties (other than the Holders’ Representative) shall use (and shall cause its Affiliates to use) commercially reasonable efforts to promptly (i) take, or cause to be taken, all actions and do, or cause to be done, all things necessary, proper or advisable to cause the conditions to closing of the other Parties hereunder to be satisfied and to consummate and make effective the Transactions (including the Mergers), in each case, as expeditiously as practicable, and (ii) obtain all approvals, consents,
registrations, Permits, authorizations and other confirmations from any Governmental Authority or third party necessary, proper or advisable to consummate the Transactions (including the Mergers).

(b) **Governmental Authorities.** Each of the Parties, and in the case of the Holders’ Representative, after Closing, shall use its commercially reasonable efforts to (i) cooperate with each other in connection with any investigation or other inquiry by or before a Governmental Authority relating to the Transactions (including the Mergers), including any proceeding initiated by a private party and (ii) keep the other Parties informed in all material respects and on a reasonably timely basis of any material communication received by such Party from, or given by such Party to, any Governmental Authority and of any material communication received or given in connection with any proceeding by a private party, in each case regarding any of the Transactions. In furtherance and not in limitation of the covenants of the Parties contained in this Section 5.3(b), each of the Parties, and in the case of the Holders’ Representative, after Closing, shall use its commercially reasonable efforts to resolve such objections, if any, as may be asserted by a Governmental Authority or other Person with respect to the Transactions (including the Mergers).

5.4 **Public Announcements.** Unless otherwise required by (i) applicable Law, (ii) stock exchange requirements, or (iii) any disclosure made in connection with the enforcement of any right or remedy relating to this Agreement or the transactions contemplated hereunder or any dispute resolution proceeding hereunder, no Party to this Agreement other than Parent shall at any time make any public announcement or disclosure in respect of this Agreement or the transactions contemplated hereby or otherwise communicate with any news media with respect to this Agreement or the transactions contemplated hereby without the prior written consent of the other Parties (which consent shall not be unreasonably withheld or delayed); provided, that, in each case, any Party to this Agreement shall be permitted to disclose the terms of this Agreement (including the Base Purchase Price or the Final Purchase Price) to its Affiliates and its and their respective managers, partners, stockholders, equityholders, attorneys, accountants, tax advisors, financial advisors, consultants, agents, employees, potential financing sources or investors or other representatives (so long as such Person is obligated and directed to maintain the confidentiality of such information).

5.5 **Access to Information.** Subject to (i) the requirements of applicable Law, (ii) any of the Company Group’s obligations to third parties with respect to confidentiality agreements and (iii) attorney-client privilege or attorney work product immunity, the Company shall afford to Parent and Parent’s Representatives, from time to time prior to the earlier of (a) the Closing or (b) the termination of the Agreement pursuant to Article VII, access during normal business hours upon reasonable advance notice to (1) all of the Company Group’s Premises, books, reports, Contracts, assets, filings with and applications to Governmental Authorities, records and correspondence (in each case, whether in physical or electronic form) and (2) to the Representatives of the Company Group as Parent may reasonably request and the Company shall furnish promptly to Parent all information and documents concerning the Company Group’s business, financial condition and operations, properties and personnel, each related to the consummation of the Transactions or the ownership or operation of the Company Group’s business, as Parent may reasonably request.

5.6 **Confidentiality.** Holders’ Representative, on behalf of the Holders, acknowledges that the success of the Company Group after the Closing Date depends upon the preservation of
the confidentiality of the Confidential Information (as hereinafter defined), that the preservation of the confidentiality of the Confidential Information is an essential premise of the bargain between the Parties and Parent would be unwilling to enter into this Agreement in the absence of this Section 5.6. Accordingly, Holders’ Representative, on behalf of the Holders, shall, and shall use its commercially reasonable efforts to cause its Affiliates and its Representatives to, keep confidential all confidential documents and information involving or relating to the Company Group or its business (the “Confidential Information”), unless (i) compelled to disclose such Confidential Information by Law so long as, to the extent permitted by Law, reasonable prior notice of such disclosure is given to Parent and the Company and a reasonable opportunity is afforded Parent and the Company to contest the same or (ii) disclosed in an Action brought by a Party in pursuit of its rights or in the exercise of its remedies hereunder; provided, that, in each case, any Party to this Agreement shall be permitted to disclose the terms of this Agreement (including the Base Purchase Price or the Final Purchase Price) to its Affiliates and its and their respective managers, partners, stockholders, equityholders, attorneys, accountants, tax advisors, financial advisors, consultants, agents, employees, potential financing sources or investors or other representatives, and, in the case of the Holders’ Representative, to the Holders, (so long as such Person is obligated and directed to maintain the confidentiality of such information). “Confidential Information” does not include any document or information which is as of the Closing Date or becomes following the Closing Date generally available to the public other than as a result of a disclosure in violation of this Section 5.6 by the receiving party or its Representatives. The provisions of this Section 5.6 shall survive the Closing Date for three (3) years following the Closing.

5.7 Notification of Certain Matters. The Company shall provide prompt written notice to Parent upon becoming aware (i) of the occurrence or nonoccurrence of any event (including any event occurring prior to the Agreement Date) that will cause, or is likely to cause, any of its representations or warranties contained in this Agreement to be untrue or inaccurate in any material respect at or prior to the Effective Time, (ii) of any failure by the Company to comply with or satisfy in any material respect any of its covenants, conditions or agreements hereunder, (iii) of the occurrence or nonoccurrence of any event that would reasonably be expected to cause any condition precedent to any obligation of Parent to consummate the Transactions (including the Mergers) not to be satisfied at or prior to the Closing Date, (iv) of any written notice or other communication from any Person alleging that the consent of such Person is or may be required in connection with the Transactions (including the Mergers), to the extent such consent is not already contemplated by this Agreement or the Disclosure Schedule, (v) of any written notice or other communication from any Governmental Authority in connection with the Transactions (including the Mergers), (vi) of the commencement or threat of commencement of any Action regarding the Transactions (including the Mergers) or otherwise relating to the Company Group or its business, or (vii) of any other material development materially and adversely affecting the assets, Liabilities, business, financial condition or operations of the Company Group; provided, however, that neither the delivery of any notice pursuant to this Section 5.7 nor obtaining any information or knowledge in any investigation pursuant to Section 5.5 or otherwise shall (x) cure any breach of, or non-compliance with, any representation or warranty requiring disclosure of such matter, or any breach of any other provision of this Agreement, (y) amend or supplement any scheduled disclosure made by the Company in ARTICLE III or (z) limit the remedies available to the Party receiving, or entitled to receive, such notice.
5.8 **Tax Matters.**

(a) **Company Prepared Tax Returns.** The Company Group shall, at the Company Group’s expense, prepare or cause to be prepared and file or cause to be filed all Tax Returns for the Company Group for all taxable periods ending on or before the Closing Date and which are due on or before the Closing Date (taking into account any extensions automatically granted) and shall pay, or cause to be paid, all Taxes shown as due on such Tax Returns. All Tax Returns referred to in the first sentence of this Section 5.8(a) shall be prepared in accordance with the past practices of the Company Group unless otherwise required by applicable Law. The Company shall provide the Parent a copy of any such Tax Return that are income Tax Returns at least fifteen (15) days prior the due date for the filing of such Tax Return and any other material Tax Return as promptly as such Tax Return is available to the Company. The Company shall consider in good faith all reasonable written comments of the Parent with respect to such Tax Returns received in a timely manner before the due date for the filing of such Tax Return.

(b) **Parent Prepared Tax Returns.** Parent shall prepare and file, or cause to be prepared and filed, all Tax Returns of the Company Group with respect to Pre-Closing Tax Periods and Straddle Tax Periods that are due to be filed after the Closing Date. All Tax Returns referred to in the first sentence of this Section 5.8(b) shall be prepared in accordance with the past practices of the Company Group unless otherwise required by applicable Law. Parent shall provide the Holders’ Representative a copy of any such Tax Return that is an income Tax Return at least fifteen (15) days prior the due date for the filing of such Tax Return and any other material Tax Return as promptly as such Tax Return is available to the Company or Parent. Parent shall consider in good faith all reasonable written comments of the Holders’ Representative with respect to Taxes for which the Holders is liable pursuant to this Agreement and which are received in a timely manner before the due date for the filing of such Tax Return.

(c) **Tax Contests.**

(i) After the Closing, each of Parent, on the one hand, and Holders’ Representative, on the other hand, shall promptly notify the other Party in writing upon receipt from a Taxing Authority of any written notice of any pending or threatened audit, examination, claim, dispute or controversy relating to Taxes (a “Tax Claim”) with respect to the Company Group for a Pre-Closing Tax Period or any Losses for which such other Party (or any of its Affiliates) could be liable pursuant to this Agreement; provided, however, the failure to give such notice shall not affect the indemnification provided hereunder except to the extent the Indemnifying Party has been materially prejudiced as a result of such failure.

(ii) The Holders may elect, through the Holders’ Representative, at the Holders’ cost and expense, to control all administrative and judicial proceedings relating to any Tax Claim with respect to a Pre-Closing Tax Period other than a Straddle Tax Period and may select counsel for the conduct of such proceedings. The Holders’ Representative shall keep Parent informed of all material developments regarding such Tax Claim and shall not settle such Tax Claim without the written consent of Parent, which consent shall not be unreasonably withheld, conditioned or delayed. Parent and its counsel (at Parent’s expense) may participate in (but not control the conduct of) the defense of such Tax Claim.
(iii) Parent shall control all administrative and judicial proceedings relating to any Tax Claim with respect to a Pre-Closing Tax Period that the Holders do not elect to control pursuant to Section 5.8(c)(ii) or with respect to any Straddle Tax Period. Parent shall keep Holders’ Representative informed of all material developments regarding such Tax Claim. Holders’ Representative and its counsel (at the Holders’ expense) may participate in (but not control the conduct of) the defense of such Tax Claim. Parent shall not settle such Tax Claim without the written consent of Holders’ Representative, which consent shall not be unreasonably withheld, conditioned or delayed.

(iv) Any dispute, controversy or claim between Parent and Holders’ Representative with respect to the defense of any Tax Claim, as described in this Section 5.8(c), shall be resolved pursuant to Section 5.8(i).

(v) In the event of any conflict between the provisions of this Section 5.8(c), and the provisions of Section 8.4(a), the provisions of this Section 5.8(c), shall control.

(d) Certification. Parent and Holders’ Representative agree, upon request from the other Party, to use their commercially reasonable efforts to obtain any certificate or other document from any Taxing Authority or any other Person as may be necessary to mitigate, reduce or eliminate any Tax that could be imposed (including, but not limited to, with respect to the contemplated Transactions).

(e) Tax Sharing Agreements. The Company Group shall terminate all Tax Sharing Agreements with respect to the Company Group as of the Closing Date and shall ensure that such agreements are of no further force or effect on and after the Closing Date and that there shall be no further liabilities or obligations imposed on any member of the Company Group under any such agreements.

(f) Cooperation. Following the Closing Date, Parent and Holders’ Representative shall, as reasonably requested by any Party: (i) assist any other Party in preparing and filing any Tax Returns relating to the Company Group that such other Party is responsible for preparing and filing; (ii) cooperate in preparing for any Tax audit of, or dispute with any Taxing Authority regarding and any judicial or administrative proceeding relating to, liability for Taxes, in the preparation or conduct of litigation or investigation of claims and in connection with the preparation of financial statements or other documents to be filed with any Taxing Authority, in each case with respect to the Company Group; (iii) make available to the other Parties and to any Taxing Authority as reasonably requested all information, records and documents in its possession relating to Taxes relating to the Company Group (at the cost and expense of the requesting Party, and in the case of the Holders’ Representative, on behalf of the Holders); (iv) provide timely notice to the other Parties in writing of any pending or threatened Tax audits or assessments relating to the Company Group for taxable periods for which any such other Party is responsible; and (v) furnish the other Parties with copies of all correspondence received from any Taxing Authority in connection with any Tax audit or information request with respect to any taxable periods (or portion thereof) for which any such other Party is responsible. For the avoidance of doubt, the cooperation noted in this Section 5.8(f) shall include signing any Tax Returns, amended Tax Returns, claims or other documents with respect to any audit, litigation or other proceedings with respect to Taxes, the
retention and (upon the other Party’s reasonable request) the provision of records and information which are reasonably relevant to any such audit, litigation or other proceeding and making employees available on a mutually convenient basis to provide additional information and explanation of any material provided hereunder.

(g) **Amended Tax Returns.** Parent shall not, and shall cause each member of the Company Group and any Affiliate of Parent not to, file any amended Tax Return in respect of any Pre-Closing Tax Period or Straddle Tax Period without the prior written consent of the Holders’ Representative, which consent shall not be unreasonably withheld, conditioned or delayed; provided, however, that no such consent shall be required with respect to any amended Tax Return that is required to be filed by applicable Tax Law; provided, further, that, prior to the filing thereof, Parent shall notify the Holders’ Representative of the filing of any such amended Tax Return that is required to be filed by applicable Tax Law. Section 5.8(b) shall apply to the preparing and filing of any such amended Tax Return.

(h) **Transfer Taxes.** The Holders shall be solely liable for any real property transfer or gains tax, stamp tax, stock transfer tax, or other similar Tax imposed as a result of or in connection with the Transactions (collectively, the “Transfer Taxes”), and any penalties or interest with respect to the Transfer Taxes. The Parties shall cooperate in filing all necessary Tax Returns and other documentation with respect to the Transfer Taxes.

(i) **Dispute Resolution for Taxes.** With respect to any dispute, controversy or claim relating to Taxes between Parent and the Holders (for any Tax for which an indemnity claim may exist under this Agreement), Parent and the Holders shall cooperate in good faith to resolve such dispute, controversy or claim between them for a period of thirty (30) days from the date written notice of such dispute, controversy or claim is received by Parent or Holders’ Representative, as the case may be. If the Parties are unable to resolve such dispute, controversy or claim, the Parties shall submit the dispute, controversy or claim for resolution, which resolution shall be final, conclusive and binding on the Parties, to a mutually agreed upon national tax and accounting firm or law firm of national reputation with respect to the Tax matter at issue that is independent with respect to each Party. The fees and expenses of such mutually agreed upon firm shall be equally shared by Parent and the Holders.

(j) **Refunds.** The Holders shall be entitled to all refunds of Taxes of the Company Group in respect of any Pre-Closing Tax Period which are received by Parent (or its affiliates) after Closing (including any such refunds used to offset any liability for Taxes for any taxable period, including any Straddle Tax Period). Parent shall promptly pay to the Exchange Agent (for further distributions to the Holders) any amount of such refund of Taxes received by the Parent or any of its Affiliates (including the Company Group) after the Closing, including any refunds used to offset any liability for Taxes for any taxable period, including any Straddle Tax Period, other than a Pre-Closing Tax Period by way of credit, net of any reasonable costs and expenses incurred in connection with obtaining such refund.

(k) **Plan of Reorganization; Intended Tax Treatment.** This Agreement is intended to constitute, and the parties hereby adopt this Agreement as, a “plan of reorganization” within the meaning Treasury Regulation Sections 1.368-2(g) and 1.368-3(a). Parent, Merger Sub
A, Merger Sub B and the Company each intend that the Mergers, considered together as a single integrated transaction for U.S. federal income Tax purposes, shall be treated for U.S. federal and applicable state and local tax purposes as a reorganization within the meaning of Section 368(a)(1)(A) of the Code, in accordance with Revenue Ruling 2001-46, 2001-2 C.B. 321. Each of the Parties agrees not to take any Tax reporting position and file any Tax Return in a manner that is inconsistent with the Intended Tax Treatment, unless required otherwise by applicable Law, and to promptly notify the respective other Party if it has determined that under applicable Law to take a Tax reporting position or file a Tax Return in a manner that is inconsistent with the Intended Tax Treatment. As of the Closing, neither the Parent nor any of Affiliates (including the Company Group after the Closing) has taken, nor has any plan to take, any action, and there is no agreement, plan or other circumstance within the control of Parent or any of its Affiliates that would prevent the Mergers from being treated in accordance with the Intended Tax Treatment.

5.9 Employment Related Agreements. As promptly as practicable after the Agreement Date, the Company shall use commercially reasonable efforts to cause each Current Employee identified on Exhibit E hereto (the “Continuing Employees”) to execute and deliver to Parent an offer letter and, to the extent indicated on Exhibit E hereto, a non-competition agreement, in each case substantially in the form(s) attached hereto as Exhibit F, which agreements shall become binding and effective as of the Closing Date (collectively, the “Employment Documents”).

5.10 Employee Matters and Company Plans.

(a) Continuing Employees. Notwithstanding anything to the contrary set forth in this Agreement, nothing in this Agreement shall be deemed to give rise to any obligation by Parent to retain any Current Employee, any group of Current Employees of the Company Group or any Company Plan following the Closing Date. Continuing Employees who become eligible to participate in any welfare benefit plan or pension plan (intended to qualify under Section 401(a) of the Code) of Parent (each a “Parent Plan”) shall receive credit for purposes of eligibility and vesting for years of service with the Company Group prior to the Closing to the extent that such service was recognized under the corresponding Company Plan prior to the Closing; provided that such service shall not be recognized if and to the extent that it would result in the duplication of benefits or is not possible or practical under a Parent Plan. For clarity, service credit shall not be given for benefit accrual, early retirement subsidies or entitlement purposes under any Parent Plan and shall not be given for any purpose under any Parent plans or programs other than welfare benefit plans or pension plans, including any equity plans, but excluding any severance programs, personal time off plans and vacation programs.

(b) Company Plans. The Company Group shall take all reasonable actions that may be necessary or appropriate to cause the Company Plans set forth in Section 5.10(b) of the Disclosure Schedule to terminate effective immediately prior to Closing (one (1) day prior to Closing in case of any Company Plan intended to qualify under Section 401(a) of the Code). Any such termination shall be undertaken (i) in accordance with the governing documents and Contracts for the Company Plans (including through plan amendment) and (ii) in conformance with applicable Laws.
(c) **No Limitation.** This Section 5.10 is not intended to amend any benefit plans or arrangements of Parent or any of its Subsidiaries, to limit the ability of Parent or any of its Subsidiaries to amend, modify or terminate any of such benefit plans or arrangements or to confer third-party beneficiary rights on any Person (including any Current Employee or any beneficiary or dependent thereof).

5.11 **No Negotiations, Etc.** Each member of the Company Group shall not, shall cause its Representatives not to, and shall advise the Holders and their respective Representatives (other than the Holders’ Representative) not to, directly or indirectly solicit, initiate, or enter into any discussions or negotiations or continue in any way any discussions or negotiations with any Person or group of Persons regarding any Competing Transaction. The Company shall promptly, but not later than forty-eight (48) hours, following the occurrence of the relevant event notify Parent in writing if any inquiries, proposals or requests for information concerning a Competing Transaction are received by any member of the Company Group, the Holders or any of their respective Representatives (other than the Holders’ Representative). The written notice shall include the identity of the Person making such inquiry, proposal or request and a summary of the material terms and conditions thereof. For purposes of this Agreement, “Competing Transaction” means a transaction or a series of related transactions (other than the Transactions) involving (i) any sale of stock or other equity interests in any member of the Company Group, (ii) a merger, consolidation, share exchange, business combination, or other similar transaction involving any member of the Company Group, (iii) any sale, lease, exchange, license (other than in the Ordinary Course of Business), mortgage, pledge, transfer, or other disposition of the assets of any member of the Company Group (other than disposition of inventory in the Ordinary Course of Business), or (iv) any other transaction or series of transactions which would reasonably be expected to preclude the consummation of the Transactions.

5.12 **Termination of the Company Option Plan.** The Company shall take (or cause to be taken) all actions necessary or appropriate to terminate, effective as of the Closing, the Company Option Plan (as well as all Company Options).

5.13 **Registration of Shares.** Parent agrees to register for public resale the Stock Consideration Shares on a Form S-3ASR (assuming Parent remains eligible for the use of such form, otherwise on a Form S-3) pursuant to the registration rights agreement substantially in the form attached hereto as Exhibit G (the “Registration Rights Agreement”). Notwithstanding anything herein to the contrary, following registration of the Stock Consideration Shares, each Consenting Holder that is an Accredited Investor, by virtue of approving the Mergers and the execution of a Written Consent and Joinder Agreement or Support Agreement, as applicable, shall agree not to sell any shares of Parent Common Stock issued to such Consenting Holder as a result of the Transactions, if the sale of such shares would, when combined with the sale of any other shares of Parent Common Stock by such Consenting Holder on any one (1)-day period, exceed five percent (5%) of the average daily trading volume of Parent Common Stock on the New York Stock Exchange over the five (5) trading days preceding such date of sale; **provided, however,** that if the aggregate number of Stock Consideration Shares represents less than fifty percent (50%) of the average daily trading volume of Parent Common Stock on the New York Stock Exchange over the five (5) trading days preceding the Closing, such resale volume limitations shall not apply. Any waiver or release
of the restrictions in this Section 5.13 granted to a particular Consenting Holder will be made available to all other Consenting Holders on a proportional basis.

5.14 Officer and Director Indemnity and Insurance. If the Merger is consummated, for six years following the Closing, Parent shall cause the Surviving Corporation to fulfill and honor the obligations of the Company to its current and former officers and directors determined as of immediately prior to the Effective Time (the “Company Indemnified Parties”) pursuant to any indemnification agreement with the Company (each, a “D&O Indemnification Agreement”) and pursuant to the Certificate of Incorporation or Bylaws (the “Indemnity Provisions”), in each case, in effect as of the Agreement Date, with respect to claims arising out of acts or omissions occurring at or prior to the Effective Time that are asserted after the Effective Time. Prior to the Closing Date, the Company intends to obtain a prepaid extended reporting period or tail policy insuring the Company Indemnified Parties under the current (or a comparable) program of directors’ and officers’ liability insurance maintained by the Company which shall be effective commencing with the Closing Date and ending six years thereafter and that shall have other terms not materially less favorable to the insured persons than the directors’ and officers’ liability insurance coverage maintained by the Company as of the Agreement Date (the “D&O Tail Insurance”). Parent agrees that if the Company purchases such policy, it shall cause the Surviving Corporation to use commercially reasonable efforts to maintain in full force and effect such D&O Tail Insurance. This Section 5.14 (i) shall survive the consummation of the Mergers, (ii) is intended to benefit each Company Indemnified Party and their respective heirs, (iii) is in addition to, and not in substitution for, any other rights to indemnification or contribution that any such Persons may have against Parent or the Surviving Corporation first arising after the earlier of the Closing Date and the termination of this Agreement by contract or otherwise, (iv) shall be binding on all successors and assigns of Parent and the Surviving Corporation, as applicable, and (v) shall not be terminated or modified in such a manner as to adversely affect the rights of any Company Indemnified Party under this Section 5.14 without the written consent of such affected Company Indemnified Party.

ARTICLE VI

CONDITIONS TO CLOSING

6.1 Conditions to Obligations of Parent, Merger Sub A and Merger Sub B. The obligations of Parent, Merger Sub A and Merger Sub B to effect the Transactions (including the Mergers) are subject to the satisfaction (or full or partial waiver by Parent) at or prior to the Closing of the following conditions:

(a) Representations and Warranties. Each of the representations and warranties of the Company contained in ARTICLE III that is qualified by “materiality,” “Company Material Adverse Effect” or a similar qualifier shall be true and correct in all respects, and each of such representations and warranties that is not so qualified shall be true and correct in all material respects, in each case, at and as of the Closing Date, except for representations and warranties made as of a specified date, the accuracy of which will be determined only as of the specified date.
(b) **Performance of Obligations of Company.** The Company shall have performed in all material respects all covenants, agreements and obligations required to be performed by it under this Agreement at or prior to the Closing.

(c) **No Litigation.** No Action shall have been instituted, commenced or threatened and no Action shall remain pending that seeks to or would reasonably be expected to (i) restrain, prevent, enjoin, prohibit or make illegal the Transactions, (ii) cause any of the Transactions to be rescinded following the Closing Date, (iii) impose material limitations on the ability of the Surviving Company to conduct its business following the Closing Date or (iv) compel Parent or the Company to dispose of any portion of the Company’s business or assets.

(d) **No Material Adverse Effect.** Since the Agreement Date, no Company Material Adverse Effect shall have occurred.

(e) **No Injunctions or Restraints.** No Order shall be in effect (i) enjoining, restraining, preventing or prohibiting consummation of the Transactions, (ii) causing any of the Transactions to be rescinded following the Closing Date, (iii) imposing limitations on the ability of the Company Group to effectively conduct its business following the Closing Date or (iv) compelling Parent or any member of the Company Group to dispose of any portion of the Company Group’s business or assets.

(f) **Governmental Consents.** All filings with and consents of any Governmental Authority required to be made or obtained in connection with the Transactions shall have been made or obtained and shall be in full force and effect and any waiting period under any applicable antitrust or competition law, regulation or other Law shall have expired or been terminated.

(g) **Delivery of Closing Certificates.** Parent shall have received:

(i) **Closing Certificate.** A certificate dated as of the Closing Date, signed by the Chief Executive Officer or the Chief Financial Officer of the Company certifying that the conditions precedent set forth in Section 6.1(a), Section 6.1(b), Section 6.1(c), Section 6.1(d), Section 6.1(e) and Section 6.1(f) have been met;

(ii) **Allocation Schedule Certificate.** A certificate dated as of the Closing Date, signed by the Chief Executive Officer or the Chief Financial Officer of the Company certifying that the Allocation Schedule is true and correct in all respects;

(iii) **Good Standing Certificates.** Certificates of good standing with respect to the Company issued by the Company’s jurisdiction of organization and the jurisdiction of the Company’s principal place of business, dated not more than ten (10) Business Days prior to the Closing Date;

(iv) **FIRPTA Certificate.** A certificate dated as of the Closing Date, signed by the Chief Executive Officer or Chief Financial Officer of the Company conforming to the requirements of Treasury Regulation Sections 1.897-2(h) and 1.1445-2(c) (3);
(v) Certificate of Reverse Merger. The Certificate of Reverse Merger duly executed by the Company; and

(vi) Employment Documentation. The Employment Documents described in Section 5.9 shall have been executed and delivered to Parent at or prior to Closing and no such Employment Document shall have been amended, cancelled or repudiated.

(h) Resignation of Officers and Directors. Parent shall have received resignations, in form and substance reasonably satisfactory to Parent, effective as of the Closing, from each officer and director of the Company Group, other than those continuing officers and directors specified to the Company by Parent in writing at least two (2) Business Days prior to the Closing Date.

(i) Release of Liens. Parent shall have received payoff letters, in form and substance reasonably satisfactory to Parent, from each lender to the Company Group evidencing the aggregate amount of Company Debt outstanding and owing to such lender as of the Closing Date and an agreement that, if such aggregate amount is paid to such lender on the Closing Date, such indebtedness shall be repaid in full and that all related Liens shall be released forthwith. In addition, Parent shall have received evidence, in a form satisfactory to Parent, that any outstanding Liens of the Company Group (other than Permitted Liens), any related UCC filings (other than those related to Permitted Liens) and any related filings with the USPTO Assignment Division have been terminated.

(j) Transaction Expenses. Parent shall have received written statements from the Company Group’s outside legal counsel and any financial advisor, accountant or other Person who provided services to the Company Group (other than Employees who provided such services only in their capacities as such), or who is otherwise entitled to any compensation from any member of the Company Group, in connection with services provided with respect to this Agreement or any of the Transactions, setting forth the total amount of Unpaid Transaction Expenses owed to such Person.

(k) Third Party Consents and Notices. The Company shall have delivered to Parent copies of consents or notices, as applicable, provided by or to the third Persons specified or referenced in Exhibit H attached hereto with respect to the consummation of the Transactions contemplated by this Agreement in a form that is reasonably acceptable to Parent.

(l) 280G Stockholder Approval or Disapproval. With respect to any payments and/or benefits that may constitute “parachute payments” under Section 280G of the Code with respect to any Employees, the Company shall have submitted such parachute payments to the Company Stockholders for approval and the Company Stockholders shall have (i) approved, pursuant to the method provided for in the regulations promulgated under Section 280G of the Code, any such “parachute payments” or (ii) have voted upon and disapproved such “parachute payments,” and, as a consequence, such “parachute payments” shall not be paid or provided for in accordance with applicable Law.

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(m) **Exchange Agreement.** The Exchange Agreement shall have been executed and delivered by the Exchange Agent to Parent at or prior to the Effective Time and shall not have been amended, terminated, cancelled or repudiated.

(n) **Stockholder Approval; Written Consent and Joinder Agreements.** The adoption of this Agreement as well as the consummation of the Transactions (including the Mergers) shall have been duly approved by the Requisite Stockholder Approval, and the Company shall have delivered to Parent Written Consent and Joinder Agreements (or Support Agreements) duly executed by the Holders of at least 90% of the Company Stock (including any Company Stock issuable as result of the Note Conversion).

(o) **No Company Options or Plans.** The Company shall have provided Parent with evidence reasonably satisfactory to Parent as to the termination of (i) the Company Option Plan, (ii) all outstanding Company Options and (iii) all Company Plans.

(p) **Registration Rights Agreement.** The Registration Rights Agreement shall have been executed and delivered by each Consenting Holder that is an Accredited Investor to Parent.

(q) **Genelex Agreements.** That certain Strategic Agreement Including Software License Agreement dated April 5, 2019 between the Company and Genelex shall have been amended (i) to terminate the exclusivity restrictions therein binding on the Company, (ii) to terminate any obligation of Genelex to pay the Company any portion of the consideration paid to or in respect of Genelex in the event of an acquisition, and otherwise (iii) in such form and substance as shall be reasonably satisfactory to Parent.

6.2 **Conditions to Obligation of the Company.** The obligation of the Company to effect the Transactions is subject to the satisfaction (or waiver, if permissible under applicable Law) prior to the Closing of the following conditions:

(a) **Representations and Warranties.** Each of the representations and warranties of Parent, Merger Sub A and Merger Sub B contained in ARTICLE IV that is qualified by “materiality,” “Parent Material Adverse Effect” or a similar qualifier shall be true and correct in all respects, and each of such representations and warranties that is not so qualified shall be true and correct in all material respects, in each case, at and as of the Closing Date, except for representations and warranties made as of a specified date, the accuracy of which will be determined only as of the specified date.

(b) **Performance of Obligations of Parent, Merger Sub A and Merger Sub B.** Parent, Merger Sub A and Merger Sub B shall have performed in all material respects all covenants, agreements and obligations required to be performed by Parent, Merger Sub A and Merger Sub B, as applicable, under this Agreement prior to the Closing.

(c) **Delivery of Closing Certificate.** The Company shall have received a certificate dated as of the Closing Date signed by the Chief Executive Officer, the Chief Financial
(d) **Governmental Consents.** All filings with and consents of any Governmental Authority required to be made or obtained in connection with the Transactions shall have been made or obtained and shall be in full force and effect and any waiting period under any applicable antitrust or competition law, regulation or other Law shall have expired or been terminated.

(e) **No Injunctions or Restraints.** No Order shall be in effect (i) enjoining, restraining, preventing or prohibiting consummation of the Transactions, (ii) causing any of the Transactions to be rescinded following the Closing Date, (iii) imposing limitations on the ability of Parent to effectively conduct its business following the Closing Date or (iv) compelling Parent or the Company Group to dispose of any portion of the Company Group’s business or assets.

(f) **Registration Rights Agreement.** The Registration Rights Agreement shall have been executed and delivered by Parent to each Consenting Holder that is an Accredited Investor which is a party thereto.

(a) **No Material Adverse Effect.** Since the Agreement Date, no Parent Material Adverse Effect shall have occurred.

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**ARTICLE VII**

**TERMINATION**

7.1 **Termination.** This Agreement may be terminated and the Transactions abandoned at any time prior to the Closing:

(a) By the mutual written consent of the Company and Parent;

(b) By either the Company or Parent, upon written notice to the other Party, if the Transactions shall not have been consummated on or before the date which is sixty (60) days after the Agreement Date, which date may be extended from time to time by mutual written consent of Parent and the Company (such date, as it may be so extended from time to time, the “Outside Date”); provided, however, that the right to terminate this Agreement under this Section 7.1(b) shall not be available to a Party whose failure to perform any of its obligations under this Agreement has been a principal cause of or directly resulted in the failure of the Transactions to occur on or before the Outside Date;

(c) By the Company or Parent, if any final and non-appealable Order or any Law has the effect of enjoining, restraining, preventing, prohibiting or making illegal the consummation of the Transactions;

(d) By Parent, if any of the representations or warranties of the Company set forth in **ARTICLE III** shall not be true and correct or if the Company has failed to perform any covenant or agreement on the part of the Company set forth in this Agreement (including an
obligation to consummate the Closing) such that the condition to Closing set forth in either Section 6.1(a) or Section 6.1(b) would not be satisfied and the breach or breaches causing such representations or warranties not to be true and correct, or the failures to perform any covenant or agreement, as applicable, are not cured on or prior to the earlier of (i) ten (10) days after written notice thereof is delivered to the Company and (ii) the Outside Date; provided that this provision shall not be available to Parent if Parent is then in breach of this Agreement;

(e) By the Company, if any of the representations or warranties of Parent, Merger Sub A or Merger Sub B set forth in ARTICLE IV shall not be true and correct or if Parent has failed to perform any covenant or agreement on the part of Parent, Merger Sub A or Merger Sub B set forth in this Agreement (including an obligation to consummate the Closing) such that the conditions to Closing set forth in either Section 6.2(a) or Section 6.2(b) would not be satisfied and the breach or breaches causing such representations or warranties not to be true and correct, or the failures to perform any covenant or agreement, as applicable, are not cured on or prior to the earlier of (i) ten (10) days after written notice thereof is delivered to Parent and (ii) the Outside Date; provided that this provision shall not be available to the Company if the Company is then in breach of this Agreement;

(f) By Parent, upon written notice to the Company, if since the Agreement Date a Company Material Adverse Effect has occurred; and

(g) By the Company, upon written notice to Parent, if since the Agreement Date a Parent Material Adverse Effect has occurred.

7.2 Effect of Termination. In the event this Agreement is terminated pursuant to Section 7.1, this Agreement shall become null and void (other than the provisions of this ARTICLE VII, Section 5.4 (Public Announcement), Section 5.6 (Confidentiality), Section 8.5(e) (Indemnification; Holders’ Representative Losses), Section 9.15 (Governing Law) and Section 9.16 (Exclusive Jurisdiction; Venue; Service of Process), all of which shall survive termination of this Agreement and remain in full force and effect), without further liability on the part of the Parties or any of their respective directors, officers or Affiliates; provided, however, that notwithstanding the foregoing, nothing contained in this Agreement shall relieve any party to this Agreement from any liability resulting from or arising out of any willful breach of any provision of this Agreement prior to the termination of this Agreement.

ARTICLE VIII

SURVIVAL AND INDEMNIFICATION

8.1 Survival. All representations and warranties of the Parties contained in this Agreement or any other Transaction Agreement or in any certificate or schedule delivered hereunder or thereunder shall survive the Closing until the First Indemnification Hold-Back Payment Date; provided, however, that, (i) the Fundamental Representations (other than the Company Fundamental IP Representations and the Company Fundamental Tax Representations) shall survive until the fourth anniversary of the Closing Date, (ii) the Company Fundamental IP Representations shall survive until [*], (iii) the Company Fundamental Tax Representations shall survive until the later
of the sixth anniversary of the Closing Date and thirty (30) days following the expiration of the applicable statute of limitations, and (iv) all of the covenants, agreements and obligations of the Parties contained in this Agreement or any other document, certificate, schedule or instrument delivered or executed in connection herewith that are intended to survive the Closing shall survive the Closing and continue in full force and effect until fully performed (the First Indemnification Hold-Back Payment Date or the last day of any of the periods specified in clauses (i), (ii) (iii) and (iv) of this Section 8.1, each alternatively referred to herein as the “Survival Date”). Notwithstanding the foregoing, if a claim or notice with respect to recovery under the indemnification provisions hereof is given in accordance with the terms hereof prior to the applicable Survival Date, the claim and any representations and warranties or covenants underlying such claim shall continue until such claim is finally resolved pursuant to the terms of this ARTICLE VIII. It is the express intent of the parties that, if an applicable survival period as contemplated by this Section 8.1 is shorter than the statute of limitations that would otherwise apply, then, by contract, the applicable statute of limitations shall be reduced to the survival period contemplated hereby. The parties further acknowledge that the time periods set forth in this Section 8.1 for the assertion of claims under this Agreement are the result of arms’-length negotiation among the parties and that they intend for the time period to be enforced as agreed by the Parties. Notwithstanding anything in this Agreement to the contrary, claims for Intentional Fraud and willful misconduct shall survive until thirty (30) days following the expiration of the applicable statute of limitations.

8.2 Indemnification.

(a) Indemnification by Holders and Parent.

(i) Subject to the terms, conditions and limitations of this ARTICLE VIII, (x) solely to the extent this Agreement is terminated prior to the Closing in accordance with Article VII, with respect to any Loss resulting from or arising out of the willful breach of any provision of this Agreement prior to such termination, the Company, and (y) following the Closing, each Consenting Holder, and with respect to any recoveries against the Indemnification Hold-Back Cash Amount and the Indemnification Hold-Back Shares or the Expense Fund Amount, each Company Optionholder and each other Holder (who shall be deemed bound by references in this ARTICLE VIII to “Consenting Holders” in such regard as the context requires), severally (in accordance with its Pro Rata Portion which, with respect to any recoveries against the Indemnification Hold-Back Cash Amount and the Indemnification Hold-Back Shares or the Expense Fund Amount, shall be calculated with reference to all Holders and Company Optionholders rather than just Consenting Holders) and not jointly, shall indemnify and hold harmless each Parent Indemnified Person from and against any Loss which such Parent Indemnified Person suffers, sustains or becomes subject to, as a result of or based upon or arising out of (and whether or not involving a Third Party Claim):

(A) any breach of, or misrepresentation or inaccuracy in, any of the representations or warranties made by the Company in this Agreement, including in any certificate delivered by or on behalf of the Company pursuant hereto;
(B) any breach of or failure to perform any covenant or agreement of (x) the Company provided for in this Agreement to be performed prior to the Closing or (y) the Holders’ Representative.

(C) any inaccuracy in the Allocation Schedule;

(D) any Intentional Fraud or willful misconduct committed by the Company, including any director, officer or Employee of the Company, under this Agreement;

(E) any Action brought by a Holder (or any other Person claiming rights by, through or associated with a Holder) that seeks to challenge the adequacy of the consideration received by such Holder pursuant to this Agreement;

(F) any Pre-Closing Taxes; and

(G) [*].

(ii) Subject to the terms, conditions and limitations of this ARTICLE VIII, Parent shall indemnify and hold harmless each Holder Indemnified Person from and against any Loss which such Holder Indemnified Person may suffer, sustain or become subject to, as a result of or based upon or arising out of (and whether or not involving a Third Party Claim):

(A) any breach of, or misrepresentation or inaccuracy in any of the representations or warranties made by Parent, Merger Sub A or Merger Sub B in this Agreement, including any certificate delivered by or on behalf of Parent pursuant hereto; and

(B) any breach of or failure to perform any covenant or agreement of Parent, Merger Sub A or Merger Sub B provided for in this Agreement.

(b) Limitations on Claims. Notwithstanding the foregoing:

(i) With respect to any claim seeking recovery of any Loss under Section 8.2(a)(i)(A) above (other than with respect to any claims arising from breach of a Company Fundamental Representation or any Intentional Fraud or willful misconduct):

(A) no Holder will have any liability for any such Loss until the aggregate amount of all such Losses exceeds an amount equal to $594,997.50 (the “Basket”) (after which the Parent Indemnified Persons shall be entitled to be indemnified only for the amount of their Losses that exceed the Basket); and

(B) the Holders will not have any Liability for any such Loss to the extent that the aggregate amount of all such Losses for which Holders have liability exceeds the Indemnification Hold-Back Cash Amount and the Indemnification Hold-Back Share Value, and the Offset Right shall be the first source of recovery for such Losses.

(ii) No Parent Indemnified Person shall be entitled to recover any Losses under this ARTICLE VIII to the extent the amount of such Losses has actually been recovered by
such Parent Indemnified Person from a Person other than another Party to this Agreement or any other Parent Indemnified Person.

(iii) The Parent Indemnified Persons shall not be entitled to indemnification with respect to any Losses as a result of or based upon or arising from any claim or Liability to the extent such claim or Liability is taken into account in determining the amount of any adjustment to the Upfront Purchase Price in accordance with Section 2.18.

(iv) If any Indemnifying Party makes any indemnification payment pursuant to this ARTICLE VIII or otherwise by reason of the transactions contemplated hereby under any theory of recovery, such Indemnifying Party shall be subrogated, to the extent of such payment and to the extent permitted by applicable Law, to any rights and remedies of the Indemnified Person to recoup such amounts from third parties with respect to the matters giving rise to indemnification hereunder. Notwithstanding anything in this Agreement to the contrary, however, no Holder shall be subrogated to any rights or remedies, or otherwise make any claim against any member of the Company Group or any other Parent Indemnified Person (regardless of the facts or the kind of Loss at issue), and each Consenting Holder, by virtue of adopting this Agreement and approving the Transactions (including the Mergers) and the execution of a Written Consent and Joinder Agreement or Support Agreement, as applicable, expressly waives any right of subrogation, contribution, advancement, indemnification or other claim against any member of the Company Group or any other Parent Indemnified Person with respect to any indemnification obligation or any other liability to which such Consenting Holder may become subject under or in connection with this Agreement.

(v) Notwithstanding anything to the contrary in this Agreement (and without limiting the other limitations set forth herein), the maximum aggregate amount of all Losses for which a Consenting Holder shall be liable pursuant to this Agreement shall be the amount of the Final Purchase Price actually received by such Consenting Holder (with Stock Consideration Shares (other than the Indemnification Hold-Back Shares) deemed, for this purpose, to have a per share value equal to the Merger Consideration Share Price, and the Indemnification Hold-Back Shares valued at the Indemnification Hold-Back Shares Value); provided, however, that (1) such limit shall not apply to any Consenting Holder in the instance of any Intentional Fraud or willful misconduct of such Consenting Holder or any Person affiliated with such Consenting Holder who has served as an officer, director, employee or consultant of any member of the Company Group and (2) with respect to any claim seeking recovery of any Loss under the Company Fundamental IP Representations, the maximum aggregate amount of all Losses for which a Consenting Holder shall be liable pursuant to this Agreement shall be [*] of the amount of the Final Purchase Price actually received by such Consenting Holder (with Stock Consideration Shares (other than the Indemnification Hold-Back Shares) deemed, for this purpose, to have a per share value equal to the Merger Consideration Share Price, and the Indemnification Hold-Back Shares valued at the Indemnification Hold-Back Shares Value).

(vi) Notwithstanding any other provision of this Agreement, in no event will any Consenting Holder be liable for any other Consenting Holder’s breach of such other Consenting Holder’s representations, warranties, covenants, or agreements contained in any Written
Consent and Joinder Agreement, Support Agreement, Letter of Transmittal, Employment Documents or other ancillary agreement hereto to which such other Consenting Holder is a party.

(c) **Mitigation; Reduction of Losses.** The Parties shall cooperate and use commercially reasonable efforts to mitigate any Losses for which an Indemnified Person is entitled to indemnification (including asserting claims under available insurance policies and third parties to the extent available); provided, however, that no Party shall be required to take any action to mitigate Losses prior to seeking indemnification hereunder. All insurance proceeds and amounts from third parties received by any Indemnified Person or any of its Affiliates in respect of any Losses shall reduce the Indemnifying Party’s obligations hereunder by the amounts received (net of (i) costs and expenses incurred by the Indemnified Person in recovering such amounts and (ii) any increase in insurance premiums under the policies from which the insurance proceeds are paid, payable by the Indemnified Person as a result of recovering such amounts). In the event that any Indemnified Person or any of its Affiliates receives any insurance proceeds with respect to any Losses subsequent to the receipt by such Indemnified Person of any indemnification payment hereunder in respect of such Losses, appropriate refunds shall be made promptly by the Indemnified Person to the Indemnifying Party of all or the relevant portion of such indemnification payment (net of any related deductibles).

(d) **Calculation of Losses.** Solely for the purposes of calculating the amount of Losses pursuant to this ARTICLE VIII (and not for determining the existence of a breach of any representation or warranty), the representations and warranties of the Company in this Agreement that are qualified by “materiality” or “Company Material Adverse Effect” shall be deemed to be made without such materiality or Company Material Adverse Effect qualifiers; provided, however, that this Section 8.2(d) shall not apply to the term “Material Contract” and shall not be deemed to render references to “Company Material Adverse Effect” to mean “Adverse Effect” or “Effect.”

8.3 **Offset Right.**

(a) **Offset Right.** Without limiting any other remedies of the Parent Indemnified Persons, from and after the Closing Date, and subject to the limitations set forth in this ARTICLE VIII, the Parent Indemnified Persons shall be entitled to recover (the “Offset Right”) against the Indemnification Hold-Back Cash Amount and the Indemnification Hold-Back Shares (to the extent any Indemnification Hold-Back Cash Amount and Indemnification Hold-Back Shares remain at the time the Parent Indemnified Persons seek to exercise the Offset Right), the amount of any Losses as to which the Holders are obligated to indemnify and hold the Parent Indemnified Persons harmless from under Section 8.2(a).

(b) **Exercise of Offset Right.** To exercise the Offset Right, Parent shall (on behalf of Parent or any other Parent Indemnified Persons at issue), prior to the Second Indemnification Hold-Back Payment Date, deliver to Holders’ Representative by the method of notice set forth in Section 9.2 (as the same may be amended from time to time as provided therein and including all Persons to be copied on any notice to Holders’ Representative), a certificate signed by Parent (an “Offset Certificate”): (i) stating in good faith that one or more of the Parent Indemnified Persons has suffered, sustained or become subject to Losses which are entitled to be recovered pursuant to the Offset Right (the “Stated Damages”); and (ii) specifying to the extent practicable in reasonable
detail the individual items of Stated Damages and the nature of the breach or other circumstance to which each such item is related. Upon the timely delivery of an Offset Certificate stating a bona fide claim for Stated Damages, any distribution of the Indemnification Hold-Back Cash Amount and Indemnification Hold-Back Shares shall be stayed to the extent of the Stated Damages (subject to the limitations set forth in this ARTICLE VIII).

(c) **Perfection of Offset Right.** After the expiration of a period of thirty (30) days following the time of delivery of an Offset Certificate to Holders’ Representative, the Offset Right shall be deemed perfected as to the applicable Stated Damages and the Indemnification Hold-Back Shares issuable pursuant to Section 2.6(c)(i)(D) and the Indemnification Hold-Back Cash Amount payable pursuant to 2.6(c)(ii)(C), 2.6(c)(iii)(C) and 2.7(a)(C), as applicable, shall be reduced by an equal amount unless, prior to the expiration of such thirty (30) day period, Holders’ Representative objects in a written statement delivered to Parent to claims made in the Offset Certificate, setting forth in reasonable detail the objections to the claim for Stated Damages.

(d) **Objection to Offset Right.** If Holders’ Representative shall timely object in writing to an exercise of the Offset Right by Parent, Holders’ Representative and Parent shall attempt in good faith to agree upon the rights of the respective Parties with respect to each of such claims within thirty (30) days after such objection. If Holders’ Representative and Parent should so agree on a claim, a memorandum setting forth such agreement shall be prepared and signed by such Parties, which shall include a statement of the amount of resulting reduction in the Indemnification Hold-Back Shares issuable pursuant to Section 2.6(c)(i)(D) and the Indemnification Hold-Back Cash Amount payable pursuant to 2.6(c)(ii)(C), 2.6(c)(iii)(C) and 2.7(a)(C), as applicable.

(e) **Settlement of Offset Right.** If no agreement can be reached after good faith negotiation between Holders’ Representative and Parent pursuant to Section 8.3(d), either Parent or Holders’ Representative may initiate an Action in accordance with Sections 9.15 and 9.16 to resolve such dispute. The decision of any such court as to the validity and amount of any claim in such Offset Certificate shall be binding and conclusive upon the Parties.

(f) **Application of Offset Right.** Any reduction in the Indemnification Hold-Back Shares issuable pursuant to Section 2.6(c)(i)(D) and the Indemnification Hold-Back Cash Amount payable pursuant to Sections 2.6(c)(ii)(C), 2.6(c)(iii)(C) and 2.7(a)(C), as applicable, pursuant to the Offset Right in this Section 8.3 shall be made with equal priority among the Holders and in accordance with each Holder’s Pro Rata Portion (but taking into account any non pro rata claims made in respect of any specific Holder pursuant to Section 8.2(a)), including if applicable as agreed by the Holders’ Representative and Parent in accordance with Section 8.3(d) or as finally determined as a result of the Action brought under Section 8.3(e).

8.4 **Claims for Indemnification; Resolution of Conflicts.**

(a) **Third Party Claims.**

(i) In the event that any Action is instituted, or that any Third Party Claim is asserted, the Indemnified Person seeking indemnification for any related Loss (including a Parent Indemnified Person seeking indemnification for any related loss through an Offset Right) shall
notify the Indemnifying Party of any such Action or claim promptly after receiving notice thereof (each, a “Third Party Indemnification Claim Notice”); provided, however, that no delay on the part of the Indemnified Person in giving any such notice shall relieve an Indemnifying Party of any indemnification obligations unless, and only to the extent that, such Indemnifying Party is actually and materially prejudiced by such delay and then only to the extent of such prejudice. Subject to the provisions of this Section 8.4(a)(i), and assuming the Indemnified Person does not have the right to elect or does not choose to elect in its Third Party Indemnification Claim Notice to assume the defense of the Third Party Claim in accordance with Section 8.4(a)(v), the Indemnifying Party shall be entitled at its own expense to conduct and control the defense of such Third Party Claim on behalf of the Indemnified Person through counsel chosen by the Indemnifying Party and reasonably acceptable to the Indemnified Person if the Indemnifying Party notifies the Indemnified Person in writing within thirty (30) days (or sooner, if the nature of the Third Party Claim so requires) of its intent to do so and confirms that the Indemnifying Party shall be obligated to indemnify the Indemnified Person against all resulting Losses in accordance with (and subject to the limitations of) this Agreement. If the Indemnifying Party does not elect within thirty (30) days (or sooner, if the nature of the Third Party Claim so requires) to defend any Third Party Claim, the Indemnified Person may defend such Third Party Claim as described below in Section 8.4(a)(v).

(ii) If the Indemnifying Party elects to defend any Third Party Claim:

(A) the Indemnifying Party shall use its commercially reasonable efforts to defend such Third Party Claim;

(B) the Indemnified Person, prior to the period in which the Indemnifying Party assumes the defense of such matter, may take such reasonable actions to preserve any and all rights with respect to such matter, without such actions being construed as a waiver of the Indemnified Person’s rights to defense and indemnification pursuant to this Agreement and without such actions being determinative of the amount of any indemnifiable Losses, except to the extent the Indemnifying Party’s ability to defend such action is actually and materially prejudiced by such actions; and

(C) the Indemnified Person may participate in the defense of such Third Party Claim with separate counsel at its own expense or, if so requested by the Indemnifying Party or, if in the reasonable opinion of counsel to the Indemnified Person, a conflict or potential conflict exists between the Indemnified Person and the Indemnifying Party that would make such separate representation advisable, at the reasonable expense of the Indemnifying Party.

(iii) In connection with this Section 8.4(a)(iii), the Parties agree to:

(A) cooperate with each other in connection with, and keep the other party informed regarding the progress of, the defense, negotiation or settlement of any such Third Party Claim;

(B) make available witnesses in a timely manner to provide testimony through declarations, affidavits, depositions, or at hearing or trial and to work with each
other in preparation for such events consistent with deadlines dictated by the particular Third Party Claim;

(C) preserve all documents and things required by litigation hold orders pending with respect to particular Third Party Claims; and

(D) provide such documents and things to each other, consistent with deadlines dictated by a particular matter, as required by legal procedure or court order, or if reasonably requested by another Party hereto;

provided that such cooperation referenced in clauses (A) through (D) shall not be required if it would reasonably be expected to result in a waiver of any attorney-client, work product or other privilege, and provided further that the Parties shall use commercially reasonable efforts to avoid production of confidential information (consistent with Law), and to cause all communications among Employees, counsel and others representing any party to a Third Party Claim to be made so as to preserve any applicable attorney-client or work-product privileges.

(iv) Except as permitted in this Section 8.4(a)(iv), the Indemnifying Party shall not, without the written consent of the Indemnified Person(s) (such consent not to be unreasonably conditioned, withheld or delayed), settle or compromise any Third Party Claim or permit a default or consent to entry of any judgment (each a “Settlement”); provided, however, that an Indemnified Person’s written consent shall not be required if (x) the claimant provides such Indemnified Person an unqualified release from all liability in respect of the Third Party Claim, (y) such Settlement does not impose any additional liabilities or obligations on the Indemnified Person and (z) with respect to any non-monetary provision of such Settlement, such provisions would not have, or would not be reasonably expected to have, any adverse effect on the business, assets, financial condition or results of operations of the Indemnified Person and its Subsidiaries, if any. Any Settlement or compromise that does not comply with the preceding sentence shall not be determinative of the amount of Losses with respect to any related claims for indemnification pursuant to this ARTICLE VIII. The costs incurred by Holders’ Representative (on behalf of the Holders) pursuant to participating in the defense of any Third Party Claims shall constitute Holders’ Representative Losses.

(v) Notwithstanding anything in this Agreement to the contrary, if (w) a Third Party Claim seeks relief other than the payment of monetary damages, (x) the subject matter of a Third Party Claim relates to the ongoing business of the Indemnified Person or its Affiliate, which Third Party Claim, if decided against the Indemnified Person, would reasonably be expected to materially and adversely affect the ongoing business of the Indemnified Person, (y) the claim for indemnification relates to or arises in connection with any criminal proceeding, action or indictment, or (z) the Indemnified Person reasonably concludes that the amount of the Third Party Claim and associated defense costs shall exceed the limits on the Indemnifying Party’s obligations under Section 8.2(b) or the Indemnifying Party’s financial resources available to defend against the Third Party Claim, then, in each such case, the Indemnified Person alone shall be entitled to defend such Third Party Claim. If the Indemnified Person elects to exercise such right to defend such Third Party Claim, then the Indemnified Person shall notify the Indemnifying Party of such election within thirty (30) days of the later of (A) receiving the applicable Third Party Indemnification Claim Notice
or (B) the occurrence of the event giving rise to the Indemnified Person’s right to make such election pursuant to clause (w), (x), (y) or (z) of this Section 8.4(a)(v). In such event, the Indemnified Person shall instead have the right to be represented by counsel of its choice (of which it shall notify the Indemnifying Party) at the Indemnifying Party’s reasonable expense and to defend such Third Party Claim. If the Indemnified Person elects to defend any such Third Party Claim, then (1) the Indemnified Person shall use its commercially reasonable efforts to defend such Third Party Claim, conduct such defense in a good faith and reasonably diligent manner, keep the Indemnifying Party reasonably informed of the status of such defense, and use commercially reasonable efforts to cooperate with the Indemnifying Party with respect to such defense during the course of such defense, (2) the Indemnifying Party may participate, at its own expense, in the defense of such Third Party Claim and shall be entitled to receive copies of complaints, pleadings, notices and material communications with respect to such Third Party Claim and (3) the Indemnified Person shall not, without the written consent of the Indemnifying Party (such consent not to be unreasonably withheld, conditioned or delay), enter into any Settlement of such Third Party Claim. If the Indemnified Person does not elect to defend such Third Party Claim, then the Indemnifying Party shall then have the right to defend such Third Party Claim as described above in Section 8.4(a)(i) (it being understood that if the Indemnified Person does not elect to defend such Third Party Claim, any default judgment entered in connection therewith will not be determinative of the existence or amount of indemnifiable Losses for such Third Party Claim).

(vi) Notwithstanding the foregoing, any Third Party Claims in respect of Taxes shall be governed by Section 5.8(c) rather than this Section 8.4(a). To the extent that the provisions of this Section 8.4(a) conflict with the provisions of Section 5.8(c) or Section 5.8(i), Section 5.8(c) or Section 5.8(i) shall control, as applicable.

(b) Notification of Other Indemnification Claims. In order for a Parent Indemnified Person to be entitled to any indemnification for claims other than as contemplated or covered by the Offset Right (although, for the avoidance of doubt, a claim tendered pursuant to the Offset Right shall suffice for all purposes even if not covered, or fully covered, by the Offset Right), such Parent Indemnified Person shall, promptly upon the discovery of the matter giving rise to any Losses, notify Holders’ Representative in writing of such Losses specifying in reasonable detail the nature of such Losses and the amounts of liability estimated to accrue therefrom (a “Non-Offset Notice”). The failure to so notify Holders’ Representative shall not relieve any Consenting Holder from any liability that such Consenting Holder may have to Parent, except to the extent that any such Consenting Holder is materially prejudiced as a result of such failure. Thereafter, Parent shall keep Holders’ Representative reasonably updated with respect to the status of the Losses at issue and the defense thereof. Holders’ Representative may object to a claim for indemnification set forth in a Non-Offset Notice by delivering a notice to the Parent Indemnified Person seeking indemnification within thirty (30) days of the delivery of the Non-Offset Notice, setting forth in reasonable detail the objections to the claim. If Holders’ Representative either notifies the applicable Indemnified Person that it does not object or does not object in writing by the end of such thirty (30)-day period, such failure to so object shall be an irrevocable acknowledgment that the Parent Indemnified Person is entitled to the full amount of the claims set forth in such Non-Offset Notice, and Holders’ Representative (as well as the Holders) shall take all necessary actions under this Agreement to effect payment in respect thereof. If Holders’ Representative shall timely object in
writing to a Non-Offset Notice, Holders’ Representative and Parent shall attempt in good faith to agree upon the rights of the respective Parties with respect to such claim within thirty (30) days after such objection. If Holders’ Representative and Parent should so agree on a claim, a memorandum setting forth such agreement shall be prepared and signed by Holders’ Representative and Parent. If no agreement can be reached after good faith negotiation between Holders’ Representative and Parent, either Parent (or any Parent Indemnified Person) or Holders’ Representative may initiate an Action in accordance with Sections 9.15 and 9.16 to resolve such dispute. The decision of any such court as to the validity and amount of any claim in such Non-Offset Notice shall be binding and conclusive upon the Parties.

(c) **Claims Unaffected by Investigation.** The right of an Indemnified Person to indemnification or to assert or recover on any claim hereunder shall not be affected by any investigation conducted with respect to, or any knowledge acquired or capable of being acquired, at any time, whether before or after the execution and delivery of this Agreement or the Closing, including with respect to the accuracy of or compliance with any of the representations, warranties, covenants, or agreements set forth in this Agreement. The waiver of any condition based on the accuracy of any representation or warranty, or on the performance of or compliance with any covenant or agreement, shall not affect the right to indemnification or other remedy based on such representation, warranty, covenant or agreement.

(d) **Surviving Company.** The Parties acknowledge and agree that if the Surviving Company suffers, incurs or otherwise becomes subject to any Losses as a result of or in connection with any misrepresentation or inaccuracy in or breach of any representation, warranty, covenant or agreement, then (without limiting any of the rights of the Surviving Company as an Indemnified Person) Parent shall also be deemed, by virtue of its ownership of the equity of the Surviving Company, to have incurred Losses as a result of and in connection with such misrepresentation, inaccuracy or breach.

(e) **Exclusive Remedy.** Subject to Section 9.9 and Section 5.8, without limiting the provisions of Section 2.18, and except for any Intentional Fraud or willful misconduct, the Parties acknowledge and agree that the remedies provided for in this ARTICLE VIII shall be the Parties’ (other than the Holders’ Representative’s) sole and exclusive remedy with respect to any and all claims for any breach, inaccuracy, misrepresentation or nonperformance, as applicable, of any representation, warranty, covenant, agreement or obligation set forth herein or otherwise relating to the subject matter of this Agreement, whether based in contract, tort, strict liability, statute (specifically including CERCLA and Environmental Laws), common law or otherwise.

(f) **Indemnification Adjusts Purchase Price for Tax Purposes.** Each Party shall, including retroactively, treat indemnification payments under this Agreement as well as exercises of the Offset Right as adjustments to the consideration paid in the Transactions for Tax purposes to the extent permitted under applicable Law.

(g) **No Subrogation.** By virtue of approving the Mergers and the execution of a Written Consent and Joinder Agreement or a Support Agreement, as applicable, each Consenting Holder (on behalf of itself and each Person affiliated with such Consenting Holder who has served as an officer, director, employee or consultant of the Company) shall agree not to make any claim.
for indemnification against any Parent Indemnified Person based on the fact that such Consenting Holder (or any Person affiliated with such Consenting Holder who has served as an officer, director, employee or consultant of the Company) was a controlling person, director, Employee or agent of the Company (whether such claim is for Losses of any kind or otherwise and whether such claim is pursuant to Law, a Charter Document, a Contract or otherwise) with respect to any claim brought by a Parent Indemnified Person against any Consenting Holder (or any Person affiliated with such Consenting Holder who has served as an officer, director, employee or consultant of any member of the Company Group) under or relating to this Agreement or any other Transaction Agreement or the Transactions. With respect to any claim brought by a Parent Indemnified Person against any Consenting Holder (or any Person affiliated with such Consenting Holder who has served as an officer, director, employee or consultant of any member of the Company Group) under or relating to this Agreement, any Transaction Agreement or the Transactions, each Consenting Holder (on behalf of itself and each Person affiliated with such Consenting Holder who has served as an officer, director, employee or consultant of any member of the Company Group) shall further expressly waive any right of subrogation, contribution, advancement, indemnification or other claim against all members of the Company Group and all other Parent Indemnified Persons with respect to any indemnification obligation or any other liability to which such Consenting Holder (or any Person affiliated with such Consenting Holder who has served as an officer, director, employee or consultant of any member of the Company Group) may become subject under or in connection with this Agreement.

(h) **Specific Element of Consideration.** The indemnification obligations of the Holders in this ARTICLE VIII are, without limitation, (i) a specific element of the consideration that induced Parent to enter into this Agreement and to perform its obligations as contemplated hereby and (ii) intended to be fully enforceable on the terms provided in this ARTICLE VIII.

(i) **No Duplication of Recovery.** Any claim for which any Indemnified Person is entitled to indemnification hereunder shall be determined without duplication of recovery by reason of the state of facts giving rise to such claim constituting a breach of more than one representation, warranty, covenant or agreement.

8.5 **Holders’ Representative.**

(a) **Appointment.** By voting in favor of the adoption of this Agreement, the approval of the principal terms of the Mergers, and the consummation of the Mergers or participating in the Mergers and receiving the benefits thereof, including the right to receive the consideration payable in connection with the Mergers, and without any further action of any Holder or the Company, each Holder shall irrevocably nominate, constitute and appoint Fortis Advisors LLC as the “Holders’ Representative” and as the true and lawful attorney-in-fact and exclusive agent for all purposes in connection with this Agreement and the Holders’ Representative Engagement Agreement and the agreements ancillary hereto and thereto with full power of substitution, to act in the name, place and stead of the Holders for purposes of executing any documents and taking any actions that Holders’ Representative may, in its sole discretion, determine to be necessary, desirable or appropriate, including, without limitation, in connection with any claim for
indemnification, compensation or reimbursement under this ARTICLE VIII. Fortis Advisors LLC hereby accepts its appointment as Holders’ Representative.

(b) Authority. The Holders grant to Holders’ Representative full authority to (i) execute, deliver, acknowledge, certify and file on behalf of each such Holder (in the name of any or all of the Holders or otherwise) any and all documents that Holders’ Representative may, in its sole discretion, determine to be necessary, desirable or appropriate, in such forms and containing such provisions as Holders’ Representative may, in its sole discretion, determine to be appropriate, in performing its duties as contemplated by this Section 8.5(b) or (ii) do or refrain from doing any further act or deed on behalf of the Holders which the Holders’ Representative deems necessary or appropriate in its sole discretion relating to the subject matter of this Agreement or the Holders’ Representative Engagement Agreement. Notwithstanding the foregoing, the Holders’ Representative shall have no obligation to act on behalf of the Holders, except as expressly provided herein and in the Holders’ Representative Engagement Agreement, and for purposes of clarity, there are no obligations of the Holders’ Representative in any ancillary agreement, schedule, exhibit or the Disclosure Schedule. Notwithstanding anything in any Transaction Agreement to the contrary: (i) each Indemnified Person shall be entitled to deal exclusively with Holders’ Representative on all matters relating to any claim for indemnification, compensation, reimbursement or set off (including Offset Rights) pursuant to ARTICLE VIII; and (ii) after Closing, Parent, each Parent Indemnified Person, and each Holder shall be entitled to rely conclusively (without further evidence of any kind whatsoever) on any document executed or purported to be executed on behalf of any Holder by Holders’ Representative and on any other action taken or purported to be taken on behalf of any Holder by Holders’ Representative as fully binding upon such Holder. A decision, act, consent or instruction of Holders’ Representative taken under this Agreement or the Holders’ Representative Engagement Agreement after Closing, including an amendment, extension or waiver of this Agreement (or any provision hereof) pursuant to Section 9.4 or Section 9.5 shall constitute a decision of the Holders and shall be final, binding and conclusive upon the Holders and their successors as if expressly confirmed and ratified in writing by the Holders, and all defenses which may be available to any Holder to contest, negate or disaffirm the action of the Holders’ Representative taken in good faith under this Agreement or the Holders’ Representative Engagement Agreement are waived. The Exchange Agent, Parent, Merger Sub A, Merger Sub B, and the Surviving Company may rely upon any such decision, act, consent or instruction of Holders’ Representative after Closing as being the decision, act, consent or instruction of the Holders. The Exchange Agent, Parent, Merger Sub A, Merger Sub B, and the Surviving Company are hereby relieved from any liability to any Person for any acts done by them in accordance with such decision, act, consent or instruction of Holders’ Representative. The Holders’ Representative shall be entitled to: (i) rely upon the Allocation Schedule, (ii) rely upon any signature believed by it to be genuine, and (iii) reasonably assume that a signatory has proper authorization to sign on behalf of the applicable Holder or other party.

(c) Power of Attorney. The powers, immunities and rights to indemnification granted to the Holders’ Representative Group hereunder: (i) are coupled with an interest and are irrevocable; (ii) may be delegated by Holders’ Representative; (iii) shall survive the death, incompetence, bankruptcy, dissolution or incapacity, as applicable, of each of the Holders and shall be binding on any successor thereto; and (iv) shall survive the delivery of an assignment by any
Holder of the whole or any fraction of his, her or its interest in the Indemnification Hold-Back Cash Amount and the Indemnification Hold-Back Shares.

(d) Replacement. The Holders’ Representative may resign at any time. If Holders’ Representative is dissolved, resigns or is otherwise unable to fulfill its responsibilities hereunder, the Holders shall (by consent of those Persons entitled, or who were entitled, to at least a majority of the Indemnification Hold-Back Shares), within ten (10) days after such dissolution, resignation or inability, appoint a successor to Holders’ Representative reasonably satisfactory to Parent. Any such successor shall succeed Holders’ Representative as Holders’ Representative hereunder. If for any reason there is no Holders’ Representative at any time, all references herein to Holders’ Representative shall be deemed to refer to the Holders who may take action by the written consent of Persons entitled to at least a majority of any further distributions hereunder.

(e) Indemnification; Holders’ Representative Losses. Certain Holders have entered into an agreement (the “Holders’ Representative Engagement Agreement”) with the Holders’ Representative to provide direction to the Holders’ Representative in connection with its services under this Agreement and the Holders’ Representative Engagement Agreement (such Holders, including their individual representatives, collectively hereinafter referred to as the “Advisory Group”). Neither the Holders’ Representative nor its members, managers, directors, officers, contractors, agents and employees nor any member of the Advisory Group (collectively, the “Holders’ Representative Group”), will incur liability of any kind with respect to any action or omission by the Holders’ Representative in connection with the Holders’ Representative’s services pursuant to this Agreement, the Holders’ Representative Engagement Agreement and any agreements ancillary hereto, except in the event of liability directly resulting from the Holders’ Representative’s gross negligence or willful misconduct. The Holders’ Representative Group shall not be liable for any action or omission pursuant to the advice of counsel. The Holders will indemnify, defend and hold harmless the Holders’ Representative Group from and against Holders’ Representative Losses, in each case as such Holders’ Representative Loss is suffered or incurred; provided, that in the event that any such Holders’ Representative Loss is finally adjudicated to have been directly caused by the gross negligence or willful misconduct of the Holders’ Representative, the Holders’ Representative will reimburse the Holders the amount of such indemnified Holders’ Representative Loss to the extent attributable to such gross negligence or willful misconduct. If not paid directly to the Holders’ Representative by the Holders, any such Holders’ Representative Losses may be recovered by the Holders’ Representative from (i) the funds in the Expense Fund and (ii) the Indemnification Hold-Back Cash Amount and the Indemnification Hold-Back Shares at such time as remaining amounts or shares would otherwise be distributable to the Holders; provided, that while this section allows the Holders’ Representative to be paid from the aforementioned sources of funds, this does not relieve the Holders from their obligation to promptly pay such Holders’ Representative Losses as they are suffered or incurred, nor does it prevent the Holders’ Representative from seeking any remedies available to it at law or otherwise. In no event will the Holders’ Representative be required to advance, expend or risk its own funds or otherwise incur any financial liability in the exercise or performance of any of its powers, rights, duties or privileges or pursuant to this Agreement, the Holders’ Representative Engagement Agreement or the transactions contemplated hereby or thereby on behalf of the Holders or otherwise. Furthermore, the Holders’ Representative shall not be required to take any action unless the Holders’
Representative has been provided with funds, security or indemnities which, in its determination, are sufficient to protect the
Holders’ Representative against the costs, expenses and liabilities which may be incurred by the Holders’ Representative in
performing such actions. Notwithstanding anything in this Agreement to the contrary, any restrictions or limitations on liability or
indemnification obligations of, or provisions limiting the recourse against non-parties otherwise applicable to, the Holders set forth
elsewhere in this Agreement are not intended to be applicable to the indemnities and immunities provided to the Holders’
Representative under this section. The foregoing indemnities will survive the Closing, the resignation or removal of the Holders’
Representative or any member of the Advisory Group or the termination of this Agreement.

(f) Expense Fund. Upon the Closing, Parent shall wire the Expense Fund Amount to the Holders’ Representative. The Expense Fund Amount shall be held by the Holders’ Representative in a segregated client account and shall be used: (i) for the purposes of paying directly or reimbursing the Holders’ Representative for any Holders’ Representative Losses incurred pursuant to this Agreement, the Holders’ Representative Engagement Agreement and the agreements ancillary hereto, or (ii) as otherwise determined by the Advisory Group (the “Expense Fund”). The Holders’ Representative is not providing any investment supervision, recommendations or advice and shall have no responsibility or liability for any loss of principal of the Expense Fund other than as a result of its gross negligence or willful misconduct. The parties agree that the Holders’ Representative is not acting as a withholding agent or in any similar capacity in connection with the Expense Fund, and has no tax reporting or income distribution obligations. The Holders will not receive any interest or earnings on the Expense Fund and irrevocably transfer and assign to the Holders’ Representative any ownership right that they may otherwise have had in any such interest or earnings. Subject to Advisory Group approval, the Holders’ Representative may contribute funds to the Expense Fund from any consideration otherwise distributable to the Holders. The Holders’ Representative will hold these funds separate from its corporate funds, will not use these funds for its operating expenses or any other corporate purposes and will not voluntarily make these funds available to its creditors in the event of bankruptcy. As soon as practicable following the completion of the Holders’ Representative’s responsibilities, the Holders’ Representative shall distribute the remaining Expense Fund (if any) to the Exchange Agent and/or Parent, as applicable, for further distribution to the Holders based on such Holder’s Pro Rata Portion, which shall be calculated with reference to all Holders and Company Optionholders rather than just Consenting Holders, except in the case of payments to employees or former employees of the Company for which employment tax withholding is required, which such amounts shall be delivered to Parent or the Surviving Company and paid through Parent’s or surviving corporation’s payroll processing service or system, as directed by the Advisory Group. For tax purposes, the Expense Fund will be treated as having been received and voluntarily set aside by the Consenting Holders at the time of Closing.

ARTICLE IX

GENERAL PROVISIONS

9.1 Interpretation. The following rules shall apply to the interpretation and construction of the terms and provisions of this Agreement and the other Transaction Agreements:
(a) **Provisions.**

(i) When a reference is made in this Agreement or another Transaction Agreement to an “Article,” “Section,” “Exhibit” or “Schedule,” such reference shall be to an Article or Section of, or an Exhibit or Schedule to, this Agreement unless otherwise indicated.

(ii) The table of contents and headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement.

(iii) Whenever the words “include,” “includes,” or “including” are used in this Agreement or any other Transaction Agreement, such words shall be deemed to be followed by the words “without limitation.”

(iv) The words “hereof,” “herein,” and “hereunder” and words of similar import when used in this Agreement refer to this Agreement as a whole and not to any particular provision of this Agreement unless otherwise expressly indicated in the accompanying text.

(v) The use of “or” is not intended to be exclusive unless otherwise expressly indicated in the accompanying text.

(vi) The defined terms contained in this Agreement or any of the other Transaction Agreements are applicable to the singular as well as the plural forms of such terms. Reference to the masculine gender shall be deemed to also refer to the feminine gender and *vice versa*.

(vii) A reference to documents, instruments or agreements also refers to all addenda, exhibits or schedules thereto.

(viii) Any reference to a provision or part of a Law shall include a reference to that provision or part as it may be renumbered or amended from time to time and any successor provision or part or any renumbering or amendment thereof unless otherwise indicated herein.

(ix) References to “deliver,” “furnish,” “provided” or “made available” means that such documents or information referenced are contained, as of a date which is at least two (2) Business Days prior to the Agreement Date, in the Company’s “Invitae” electronic data room hosted by Microsoft.

(x) References to “$” or “dollars” shall be deemed references to United States dollars.

(xi) When calculating the period of time before which, within which or following which, any act is to be done or step taken pursuant to this Agreement, the date that is the reference date in calculating such period shall be excluded. If the last day of such period is a non-Business Day, the period in question shall end on the next succeeding Business Day.
(b) **No Presumption.** The Parties have participated jointly in the negotiation and drafting of this Agreement and, in the event any ambiguity or question of intent or interpretation arises, this Agreement shall be construed as jointly drafted by the Parties and no presumption or burden of proof shall be used to favor or disfavor any Party by virtue of the authorship of any provision of this Agreement.

9.2 **Notices.** All notices, waivers, consents and other communications to any Party hereunder shall be in writing and shall be deemed given (i) when personally delivered, (ii) when receipt is electronically confirmed, if sent by email of a .pdf document, (iii) one (1) Business Day after deposit with a nationally recognized overnight courier, specifying next day delivery, with proof of receipt or (iv) three (3) Business Days after being sent by registered or certified mail, return receipt requested and postage prepaid, in each case to the Parties at the address, or if applicable, email address following such Party’s name below or such other address or email address as such Party may subsequently designate to the other Parties by notice in accordance with this Section 9.2, provided that with respect to notices deliverable to the Holders’ Representative, such notices shall be delivered solely via email or facsimile:

If to Parent, Merger Sub A or Merger Sub B, to:

Invitae Corporation  
1400 16th Street  
San Francisco, CA 94103  
Attention: Tom Brida, General Counsel  
Email:

with copies (which shall not constitute notice) to:

Pillsbury Winthrop Shaw Pittman LLP  
12255 El Camino Real, Suite 300  
San Diego, CA 92130  
Attention: Mike Hird  
Email: mike.hird@pillsburylaw.com

If to the Company (prior to the Closing), to:

YouScript Incorporated  
710 2nd Ave #600,  
Seattle, WA 98104  
Attention: Kristine Ashcraft  
Email:

with a copy (which shall not constitute notice) to:

Covington & Burling LLP  
Salesforce Tower  
415 Mission Street, Suite 5400
9.3 **Assignment and Succession.** Neither this Agreement nor any of the rights, interests or obligations hereunder may be assigned or delegated by any of the Parties without the written consent of the other Parties, except that Parent, Merger Sub A or Merger Sub B may, without the prior consent of any other Party, collaterally assign this Agreement to any lender; provided that no such assignment shall relieve the assigning Party of any of its obligations hereunder. Any assignment of this Agreement or any of the rights, interests or obligations hereunder not permitted under this *Section 9.3* shall be null and void *ab initio*. Subject to the foregoing terms of this *Section 9.3*, this Agreement shall be binding upon, inure to the benefit of and be enforceable by the Parties and their respective successors and permitted assigns.

9.4 **Amendment or Supplement.** Subject to the requirements of applicable Law, this Agreement may be amended at any time by execution of an instrument in writing identifying itself as an amendment signed, when amended prior to the Closing, by Parent, Merger Sub A, Merger Sub B and the Company and, when amended on or after the Closing, by Parent and Holders’ Representative. For purposes of this *Section 9.4*, the Consenting Holders have agreed pursuant to the Written Consent and Joinder Agreements or Support Agreements, as applicable, that any amendment of this Agreement consented to by Holders’ Representative shall be binding on and enforceable against them, whether or not they have signed this Agreement or such amendment.

9.5 **Waivers.** No waiver of any provision of this Agreement shall be valid and binding unless it is in writing and signed by the Party against whom the waiver is to be effective. No failure on the part of any Party in exercising any right, privilege or remedy hereunder and no delay on the part of any Party in executing any right, privilege or remedy under this Agreement, shall operate as a waiver thereof, nor shall any single or partial exercise of any such right preclude any other or further exercise thereof or the exercise of any other right hereunder. No notice to or demand on a Party made hereunder shall operate as a waiver of any right of the Party giving such notice or making such demand to take further action without notice or demand as permitted hereunder.

9.6 **Entire Agreement.** This Agreement, including the Schedules and Exhibits hereto and the other documents referred to herein which form a part hereof, the Confidentiality Agreement and the Transaction Agreements contain the entire understanding of the Parties with respect to the subject matter contained herein and therein. This Agreement supersedes all prior and contemporaneous, agreements, arrangements, contracts, discussions, negotiations, undertakings
and understandings (whether written or oral) between the Parties with respect to such subject matter (other than the Transaction Agreements and the Confidentiality Agreement).

9.7 **No Third-Party Beneficiaries.** Nothing in this Agreement, express or implied, is intended to or shall confer upon any Person (other than the Parties) any right, benefit or remedy of any nature whatsoever under this Agreement, except that after the Closing, Parent Indemnified Persons, Holder Indemnified Persons and D&O Indemnified Persons, shall each be third party beneficiary for purposes of enforcing the rights granted to the Parent Indemnified Persons, Holder Indemnified Persons and D&O Indemnified Persons, respectively. For the avoidance of doubt, no consent of any Indemnified Person shall be necessary to amend any provision of this Agreement.

9.8 **Remedies Cumulative.** Except as otherwise provided in this Agreement, all rights and remedies of each of the Parties shall be cumulative and the exercise of any one or more rights or remedies shall not preclude the exercise of any other right or remedy available hereunder or under applicable Law.

9.9 **Specific Performance.** The Parties agree that each of the Parties would be irreparably harmed if any of the provisions of this Agreement are not performed in accordance with their specific terms and that any breach of this Agreement by the other Parties could not be compensated adequately by monetary damages alone. Accordingly, the Parties agree that, in addition to any other remedy to which such Party may be entitled to at Law or in equity, each Party shall be entitled to temporary, preliminary and/or permanent injunctive relief or injunctions to prevent breaches or threatened breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement (including the right to compel the other Parties to cause the Transactions to be consummated on the terms and subject to conditions set forth in this Agreement) without having to prove irreparable harm or that monetary damages would be inadequate. The Parties expressly waive any requirement under any Law that the other Parties obtain any bond or give any other undertaking in connection with any action seeking injunctive relief or specific performance of any of the provisions of this Agreement. Each of the Parties further agrees that in the event of any action for specific performance relating to this Agreement or the Transactions, such Party shall not assert and hereby waives the defense that a remedy at Law would be adequate or that specific performance is not an appropriate remedy for any reason in Law or equity.

9.10 **Severability.** If a court of competent jurisdiction finds that any term or provision of the Agreement is invalid, illegal or unenforceable under any Law or public policy, the remaining provisions of the Agreement shall remain in full force and effect if the economic and legal substance of this Agreement and the Transactions shall not be affected in any manner materially adverse to any Party. Any such term or provision found to be illegal, invalid or unenforceable only in part or in degree shall remain in full force and effect to the extent not invalid, illegal or unenforceable. Upon the determination that any term or provision is invalid, illegal or unenforceable, the Parties intend that such provision shall be construed by modifying or limiting it so as to be valid and enforceable to the maximum extent possible under applicable Law and compatible with the consummation of the Transactions as originally intended.

9.11 **Costs and Expenses.** Except as otherwise specified herein, whether or not the Transactions are consummated, each Party (in the case of the Holders’ Representative, on behalf
of the Holders) shall pay all costs and expenses it has incurred in connection with this Agreement and the Transactions.

9.12 **Time of Essence.** The Parties acknowledge that the Outside Date specified in Section 7.1(b) is essential and therefore agree that no Party wishing to terminate this Agreement in accordance with Section 7.1(b) shall be required to extend the Outside Date to allow any other Party to satisfy any condition or perform any obligation under this Agreement.

9.13 **Obligation of Parent.** Parent shall cause each of Merger Sub A and Merger Sub B to comply in all respects with each of the representations, warranties, covenants, obligations, agreements and undertakings made or required to be performed by Merger Sub A and Merger Sub B, respectively, in accordance with the terms of this Agreement and the Transactions.

9.14 **Counterparts.** This Agreement may be executed in several counterparts, each of which shall be deemed an original copy of this Agreement and all of which, when taken together, shall constitute one instrument. The exchange of copies of this Agreement and manually executed signature pages by transmission by email of a .pdf of a handwritten original signature or signatures to the other Parties shall constitute effective execution and delivery of this Agreement and may be used in lieu of the original Agreement for all purposes. The signature of a Party transmitted by electronic means shall be deemed to be an original signature for any purpose.

9.15 **Governing Law.** This Agreement and all claims or causes of action (whether sounding in contract or tort) arising under or related to this Agreement, shall be governed by and construed in accordance with, the Laws of the State of Delaware, without regard to any rule or principle that might refer the governance or construction of this Agreement to the Laws of another jurisdiction.

9.16 **Exclusive Jurisdiction; Venue; Service of Process.** In any action or proceeding between any of the Parties arising under or related to this Agreement, the other Transaction Agreements or the Transactions, each of the Parties (i) knowingly, voluntarily, irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the state or federal courts located in the City and County of San Francisco, California, (ii) agrees that all claims in respect of any such action or proceeding shall be heard and determined exclusively in accordance with clause (i) of this Section 9.16, (iii) waives any objection to the laying of venue of any such action or proceeding in such courts, including any objection that any such action or proceeding has been brought in an inconvenient forum or that the court does not have jurisdiction over any Party and (iv) agrees that service of process upon such Party in any such action or proceeding shall be effective if such process is given as a notice in accordance with Section 9.2, except in the case of the Holders. The Parties agree that any Party may commence a proceeding in a court other than the above-named courts solely for the purpose of enforcing an order or judgment issued by one of the above-named courts.

* * *

[Signature page follows]

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IN WITNESS WHEREOF, the Parties have caused this Agreement and Plan of Merger to be duly executed and delivered as of the date first above written.

PARENT: INVITAE CORPORATION

By: /s/ Sean E. George, Ph.D.
Name: Sean E. George, Ph.D.
Title: President and Chief Executive Officer

MERGER SUB A: YASAWA MERGER SUB A INC.

By: /s/ Tom Brida
Name: Tom Brida
Title: Chief Executive Officer

MERGER SUB B: YASAWA MERGER SUB B LLC

By: /s/ Tom Brida
Name: Tom Brida
Title: President

COMPANY: YOUSCRIPT INCORPORATED

By: /s/ Kristine Ashcraft
Name: Kristine Ashcraft
Title: Chief Executive Officer

HOLDERS' REPRESENTATIVE: FORTIS ADVISORS LLC, solely in its capacity as the Holders’ Representative

By: /s/ Ryan Simkin
Name: Ryan Simkin
Title: Managing Director
UNIT PURCHASE AGREEMENT
among
INVITAE CORPORATION,
DAVID COLAIuzzi,
CHRIS HOWLETT,
ANTHONY MUHLENKAMP,
GERALD SCHNEIDER,
MATT LEHRIAN,
and
CHRIS HOWLETT,
as Sellers’ Representative
March 10, 2020
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**EXHIBITS**

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Exhibit A – Net Working Capital Illustration  
Exhibit B – List of Continuing Employees  
Exhibit C – Form of Non-Compete Agreement  
Exhibit D – Registration Rights Agreement  
Exhibit E – Third Party Consents
UNIT PURCHASE AGREEMENT

THIS UNIT PURCHASE AGREEMENT (this “Agreement”) is entered into and dated as of March 10, 2020 (the “Agreement Date”) by and among: (i) each of David Colaizzi and Chris Howlett (collectively referred to herein as the “Company Unitholders”, and each individually as a “Company Unitholder”); (ii) each of Anthony Muhlenkamp, Gerald Schneider, and Matt Lehrian (collectively referred to herein as the “Company Noteholders”, and each individually as a “Company Noteholder”); (iii) the Sellers’ Representative (as defined below), but solely with respect to the provisions expressly applicable to the Sellers’ Representative as set forth herein; and (iv) Invitae Corporation, a Delaware corporation (“Buyer”). Each of the Sellers, Buyer and Sellers’ Representative may be individually referred to herein as a “Party” and collectively referred to herein as the “Parties.” Capitalized terms used herein have the meanings ascribed thereto in Article I or elsewhere in this Agreement as identified in Article I.

RECITALS

WHEREAS, as of the Agreement Date, the Company Unitholders collectively own all of the outstanding units of membership interest (the “Company Units”) of Genetic Solutions, LLC, a Pennsylvania limited liability company (the “Company”);

WHEREAS, as of the Agreement Date, the Company Noteholders collectively hold convertible promissory notes issued by the Company in aggregate principal amount of $900,000 (the “Company Notes”) and intend to convert the aggregate principal and accrued but unpaid interest under such Company Notes into Company Units prior to Closing (the “Note Conversions”); and

WHEREAS, pursuant to the terms and conditions of this Agreement, on the Closing Date, Buyer is purchasing from the Sellers and the Sellers are selling to Buyer all of the Company Units (including all Company Units issued as a result of the Note Conversions) (such purchase and sale, the “Unit Purchase”).

NOW, THEREFORE, in consideration of the foregoing and the mutual agreements and covenants set forth below, and intending to be legally bound hereby, the Parties hereby agree as follows:
Article I
CERTAIN DEFINITIONS; CONSTRUCTION

1.1 Certain Definitions. The following terms shall have the following meanings in this Agreement:

“Accounting Methodology” means the accounting methods, practices and procedures used to prepare the Financial Statements.

“Action” means any claim, controversy, suit, action or cause of action, litigation, arbitration, investigation, opposition, interference, audit, hearing, demand, assessment, complaint, citation, proceeding, order or other legal proceeding (whether sounding in contract or tort or otherwise, whether civil, criminal, administrative or otherwise and whether brought at law or in equity or under arbitration or administrative regulation) and any written notice of violation, notice of potential responsibility or any notice alleging liability.

“Affiliate” means, with respect to any Person, any other Person that, directly or indirectly, controls, or is controlled by, or is under common control with, such Person. For this purpose, “control” (including, with its correlative meanings, “controlled by” and “under common control with”) means the possession, directly or indirectly, of the power to direct or cause the direction of management or policies of a Person, whether through the ownership of securities or partnership or other ownership interests, by contract or otherwise. For the avoidance of doubt, (i) from and after the Closing Date, the Company shall be deemed not to be an Affiliate of the Sellers, (ii) prior to the Closing Date, YouScript shall be deemed not to be an Affiliate of the Company and (iii) 5 Star Development, Inc., a Pennsylvania corporation (“5 Star”), shall be deemed not to be an Affiliate of the Company.

“Anti-Kickback Statute” means the Federal Health Care Program Anti-Kickback Statute, 42 U.S.C. § 1320a-7b(b), and all regulations promulgated thereunder.

“Approved Product” means [*].

“Base Purchase Price” means $20,666,667.

“Business” means the development and commercialization of pharmacogenetic testing solutions and the provision of related services.

“Business Day” means any day other than a Saturday, Sunday or any other day on which banking institutions in San Francisco, California are authorized or required by Law or order to remain closed.

“Buyer Fundamental Representations” means the representations and warranties contained in Section 5.1 (Organization), Section 5.2 (Authority; Noncontravention), Section 5.5 (Shares of Common Stock) and Section 5.6 (No Broker and No Transaction Expenses).
“Buyer Indemnified Person” means each of the Company (following the Closing), Buyer and their respective Affiliates and each of the respective equity holders, directors, officers, employees, agents, successors and assigns of each of the foregoing Persons.

“Buyer Material Adverse Effect” means a Material Adverse Effect with respect to Buyer.

“Buyer’s Common Stock” means shares of Buyer’s common stock, par value $0.0001 per share, or any other shares of capital stock into which such common stock may be reclassified, converted or exchanged.

“CERCLA” is defined within the definition of “Environmental Laws” below.

“Change in Control Payments” means (i) any bonus, severance or other payment that is created, accelerated, accrues or becomes payable by the Company to any present or former member, manager, officer, Employee or Consultant, including pursuant to an employment agreement, any Company Plan or any other Contract, and (ii) any Change in Control Payment that accrues or becomes payable by the Company to any Governmental Authority or other Person under any Law or Contract, including in connection with the making of any filings, the giving of any notices or the obtaining of any consents, authorizations or approvals, in each case of each of (i) and (ii), as a result of the consummation of the Transactions or in connection with the execution and delivery of this Agreement.

“Charter Documents” means, with respect to any entity, the certificate of incorporation and bylaws, certificate of formation and operating agreement, or similar organizational documents of such entity.

“Closing Cash” means the fair market value of all cash and cash equivalents held by the Company as of the Closing (before taking into account the consummation of the transactions contemplated hereby), determined in accordance with the Accounting Methodology, excluding, to the extent applicable, (i) outstanding (uncleared) checks, drafts, wire transfers or deposits in transit, and other debits and credits in-process, (ii) restricted balances, (iii) amounts held in escrow, (iv) amounts held in banks outside of the United States in accounts that cannot be readily expatriated due to foreign exchange controls or other applicable Laws, (v) the proceeds of any casualty loss with respect to any asset held or owned by the Company (to the extent that any such asset has not been repaired or replaced or the liability for the repair or replacement of such asset has not been paid or accrued as a current liability), and (vi) cash received with respect to unperformed work or installations and reflected as deferred revenues on the Estimated Balance Sheet.

“Closing Net Working Capital” means, as of the Closing, an amount equal to (i) the sum of (x) the current assets of the Company, other than cash and cash equivalents, plus (y) Closing Cash, reduced by (ii) the liabilities of the Company (excluding Company Debt, but including all Company Transaction and Bonus Expenses), in each case as determined in accordance with the Accounting Methodology and the sample calculation attached hereto as Exhibit A.

“Collection and Use” (and its variants) means the collection, use, interception, storage, receipt, purchase, sale, maintenance, transmission, transfer, disclosure, processing and/or use of Personal Data.

“Company Debt” means, as at any time with respect to the Company, without duplication, all Liabilities with respect to principal, accrued and unpaid interest, penalties, premiums and any other fees, expenses and breakage costs on and other payment obligations arising under any (i) indebtedness for borrowed money (including amounts outstanding under overdraft facilities), (ii) indebtedness issued in exchange for or in substitution for borrowed money, (iii) obligations for the deferred purchase price of property, goods or services other than trade payables arising in the Ordinary Course of Business (but including any deferred purchase price Liabilities, earnouts, contingency payments, seller notes, promissory notes or similar Liabilities, in each case, related to past acquisitions by the Company and for the avoidance of doubt, whether or not contingent), (iv) obligations evidenced by any note, bond, debenture, guarantee or other debt security or similar instrument or Contract, (v) liabilities under capitalized leases, (vi) obligations, contingent or otherwise, in respect of amounts drawn under letters of credit and banker’s acceptance or similar credit transactions, (vii) obligations under Contracts relating to interest rate protection or other hedging arrangements, to the extent payable if such Contract is terminated at Closing, and (viii) guarantees of the types of obligations described in sub clauses (i) though (vii) above. For the avoidance of doubt, the Company Notes shall not constitute Company Debt for the purposes of this Agreement.

“Company Intellectual Property Rights” means all Intellectual Property Rights owned by the Company or used by the Company in connection with the business of the Company as currently conducted, including all Intellectual Property Rights in and to Company Technology.

“Company Material Adverse Effect” means a Material Adverse Effect with respect to the Company.

“Company Plans” means (i) “employee benefit plans” (as defined in Section 3(3) of ERISA, as amended), (ii) individual change in control or severance agreements or arrangements and (iii) other benefit plans, policies, agreements or arrangements, including bonus or other incentive compensation, unit purchase, equity or equity-based compensation, deferred compensation, profit sharing, change in control, severance, pension, retirement, welfare, sick leave, vacation, loans, salary continuation, health, dental, disability, flexible spending account, service award, fringe benefit, life insurance and educational assistance plan, policies, agreements or arrangements, whether written or oral, under which any Employee, Consultant or director of the Company participates and which is maintained, contributed to or participated in by the Company, or with respect to which the Company has or may have any obligation or liability, contingent or otherwise.

“Company Technology” means any and all Technology that is owned by the Company or used in connection with, or necessary to the conduct of, the business of the Company as currently conducted, including Proprietary Software.
"Company Transaction and Bonus Expenses" means an amount equal to (i) the aggregate fees and expenses payable or reimbursable by the Company to investment bankers, finders, consultants, attorneys, accountants and other advisors engaged by the Company in connection with negotiation, entering into and consummation of this Agreement and the Transactions, plus (ii) all Change in Control Payments, plus (iii) all employer-portion payroll or employment Taxes incurred in connection with any Change in Control Payments. For the avoidance of doubt, the following shall not constitute Company Transaction and Bonus Expenses: (x) any severance payments as a result of any terminations effected by Buyer after the Closing; (y) any “double trigger” change of control obligations which have, as a second trigger, any termination effected by Buyer following the Closing; and (z) any retention or similar bonus awarded by Buyer or committed by Buyer to be paid following the Closing.

"Competitive Business" means any business or other undertaking which engages in, or otherwise competes with, the Business.

"Contract" means any contract, loan or credit agreement, debenture, note, guaranty, bond, mortgage, indenture, deed of trust, license, lease or other agreement, arrangement or instrument (in each case, as applicable, whether written or oral) that is legally binding, as well as any term sheet, course of dealing or other arrangement pursuant to which any duty, obligation or Liability may exist.

"Disclosure Schedule" means a document delivered by the Sellers to Buyer referring to the representations and warranties in Article IV.

"DOL" means the United States Department of Labor.

"DR Plans" means the Company’s disaster recovery and business continuity plans.

"Earnout Date" means date on which Buyer files with the SEC a periodic report on Form 10-Q or Form 10-K in respect of a fiscal quarter during the Earnout Period (noting, in the instance of any Form 10-K, that the applicable quarter is the fourth quarter of the Company’s fiscal year at issue).

"Earnout Period" means the period which begins ninety (90) days after receipt by the Company of [*] and continues until the earlier of (i) four (4) years after the date of such receipt or (ii) March 31, 2025. For the avoidance of doubt, (x) no Earnout Period shall occur if [*] and (y) there shall be no more than one (1) Earnout Period (i.e., beginning on the date of the first LCD received in respect of an Approved Product, with no additional Earnout Period commencing upon LCDs received in respect of additional Approved Products).

"Earnout Revenue" means [*] of gross revenues actually received by Buyer, as a result of sales of Approved Products by or on behalf of Buyer, during the Earnout Period (but solely the amount of gross revenues actually attributable to such Approved Products) from [*].

"Environmental Laws" means all Laws relating in any way to the environment, preservation or reclamation of natural resources, the presence, management or Release of, or exposure to,

“Environmental Liabilities” means, with respect to any Person, all liabilities, obligations, responsibilities, remedial actions, losses, damages, punitive damages, consequential damages, treble damages, liens, costs and expenses (including all reasonable fees, disbursements and expenses of counsel, experts and consultants and costs of investigation and feasibility studies), fines, penalties, sanctions and interest incurred as a result of any Action, claim or demand by any other Person or in response to any violation of Environmental Law, whether known or unknown, accrued or contingent, whether based in contract, tort, implied or express warranty, strict liability, criminal or civil statute or administrative regulation, to the extent based upon, related to, or arising under or pursuant to any Environmental Law, environmental Permit, order or agreement with any Governmental Authority or other Person, which relates to any environmental, health or safety condition, violation of Environmental Law or Release or threatened Release of Hazardous Materials.


“European Economic Area” means the member countries of the European Union, Norway, Iceland and Lichtenstein.

“Expense Fund Amount” means $40,000.


“Final Purchase Price” means the sum of (i) the Base Purchase Price, minus (ii) the Company Debt, minus (iii) the amount, if any, by which the Net Working Capital Threshold exceeds the Closing Net Working Capital, plus (iv) the amount, if any, by which the Closing Net Working Capital exceeds the Net Working Capital Threshold.

“Fundamental Representations” means, collectively, the Seller Fundamental Representations and the Buyer Fundamental Representations.

“GAAP” means the generally accepted accounting principles in the United States.

“Governmental Authority” means any (i) nation, region, state, county, city, town, village, district or other jurisdiction, (ii) federal, state, local, municipal, foreign or other government, (iii)
department, agency or instrumentality of a foreign or other government, including any state-owned or state-controlled instrumentality of a foreign or other government, (iv) governmental or quasi-governmental entity of any nature (including any governmental agency, branch, department or other entity and any court or other tribunal), (v) international or multinational organization formed by states or governments, (vi) organization that is designated by executive order pursuant to Section 1 of the United States International Organizations Immunities Act (22 U.S.C. 288 of 1945), as amended and the rules and regulations promulgated thereunder or (vii) other body entitled to exercise any administrative, executive, judicial, legislative, police or regulatory authority.

“Hazardous Materials” means any material, substance or waste that is regulated, classified, or otherwise characterized under or pursuant to any Environmental Law as “hazardous”, “toxic”, a “pollutant”, a “contaminant”, “radioactive” or words of similar meaning or effect, including petroleum and its by-products, asbestos, polychlorinated biphenyls, radon, mold, urea formaldehyde insulation, chlorofluorocarbons and all other ozone-depleting substances.

“Health Care Laws” means any Laws relating to health care regulatory and reimbursement matters, including (i) the Federal Ethics in Patient Referrals Act, 42 U.S.C. § 1395nn, and all regulations promulgated thereunder, (ii) the Anti-Kickback Statute, (iii) the False Claims Act, (iv) the Occupational Safety and Health Act, and all regulations, agency guidance or similar legal requirements promulgated thereunder, (v) the Federal Food, Drug and Cosmetic Act, 21 U.S.C. § 321 et seq., and all regulations, agency guidance or similar legal requirements promulgated thereunder, (vi) the Public Health Service Act, 42 U.S.C. § 201 et seq., and all regulations, agency guidance or similar legal requirements promulgated thereunder, (vii) the Clinical Laboratory Improvement Amendments, 42 U.S.C. § 263a, and all regulations, agency guidance or similar legal requirements promulgated thereunder, (viii) applicable Laws of the United States Drug Enforcement Administration, (ix) the Medicare Act, 42 U.S.C. § 1395 et seq., and all regulations, agency guidance, or similar legal requirements promulgated thereunder, (x) state self-referral, anti-kickback, fee-splitting and patient brokering Laws, (xi) Information Privacy and Security Laws, including those related to genetic testing and the privacy of genetic testing results, and (xii) state Laws governing the licensure and operation of clinical laboratories and billing for clinical laboratory services.

“HIPAA” means, collectively, the Health Insurance Portability and Accountability Act of 1996 as amended by the Health Information Technology for Economic and Clinical Health Act (“HITECH”), implementing regulations promulgated thereunder and related guidance issued from time to time.

“Indemnification Hold-Back Amount” means $1,500,000.

“Indemnification Hold-Back Shares” means a number of shares of Buyer’s Common Stock equal to the quotient of (i) the Indemnification Hold-Back Amount divided by (ii) the Trailing Average Share Price calculated as of the Agreement Date.

“Indemnified Person” means a Buyer Indemnified Person or a Seller Indemnified Person, as applicable.
“Indemnifying Party” means Buyer or the Sellers (including, where applicable, Sellers’ Representative on behalf of the Sellers, except for provisions relating to an obligation to make or a right to receive any payments), as applicable.

“Information Privacy and Security Laws” means all applicable Laws concerning the privacy and/or security of Personal Data (including any Laws of jurisdictions where the Personal Data was collected, to the extent applicable), and all regulations promulgated thereunder, including, where applicable, HIPAA, state data privacy and breach notification Laws, state social security number protection Laws, any applicable Laws concerning requirements for website and mobile application privacy policies and practices, data or web scraping, call or electronic monitoring or recording or any outbound communications (including, outbound calling and text messaging, telemarketing, and e-mail marketing), the European Union Directive 95/46/EC, the European Union General Data Protection Regulation (GDPR), the Federal Trade Commission Act, the Gramm Leach Bliley Act, the Fair Credit Reporting Act, the Fair and Accurate Credit Transaction Act, the CAN-SPAM Act, the Telephone Consumer Protection Act, the Children’s Online Privacy Protection Act, and state consumer protection Laws.

“Information System” means software, hardware, computer and telecommunications equipment and other information technology and related services.

“Intellectual Property Rights” means the entire right, title and interest in and to all proprietary rights of every kind and nature however denominated, throughout the world, including: (i) patents, industrial designs, copyrights, mask work rights, trade secrets, database rights and all other proprietary rights in Technology; (ii) trademarks, trade names, service marks, service names, brands, trade dress, logos and other indicia of origin and the goodwill and activities associated therewith; (iii) domain names, rights of privacy and publicity and moral rights; (iv) any and all registrations, applications, recordings, licenses and common-law rights relating to any of the foregoing; and (v) all Actions and rights to sue at law or in equity for any past or future infringement or other impairment of any of the foregoing, including the right to receive all proceeds and damages therefrom and all rights to obtain renewals, continuations, divisions, or other extensions of legal protections pertaining thereto.

“Intentional Fraud” means the willful and knowing commission of fraud with the specific intent to deceive and mislead.

“IRS” means the United States Internal Revenue Service.

“Knowledge” means (i) with respect to any individual, the actual knowledge following due inquiry of the specified individual, and (ii) with respect to any entity, the actual knowledge of the executive officers of such entity following reasonable inquiry; provided, however, the terms “Knowledge of the Company” or “to the Company’s Knowledge” each mean the actual knowledge following reasonable inquiry of David Colaizzi, Chris Howlett and Tia Aulinskas.

“Law” means any United States federal, state or local or any foreign law, statute, standard, ordinance, code, rule or regulation, resolution or promulgation, agency guidance or similar legal requirement or any Order or any Permit granted under any of the foregoing or any similar provision.
having the force or effect of law and includes Health Care Laws and Information Privacy and Security Laws.

“LCD” shall have the meaning set forth in section 1869(f)(2)(B) of the Social Security Act.

“Liability” means, with respect to any Person, any liability or obligation of such Person whether known or unknown, whether asserted or not asserted, whether determined, determinable or otherwise, whether absolute or contingent, whether accrued or unaccrued, whether liquidated or unliquidated, whether directly incurred or consequential, whether due or to become due and whether or not required under GAAP to be accrued on the financial statements of such Person.

“Lien” means any charge, encumbrance, claim, community or other marital property interest, equitable ownership interest, collateral assignment, lien (statutory or otherwise), license, option, pledge, security interest, mortgage, deed of trust, attachment, right of way, easement, restriction, encroachment, servitude, right of first offer or first refusal, buy/sell agreement and any other restriction or covenant with respect to, or condition governing the use, construction, voting (in the case of any equity interest), transfer, receipt of income or exercise of any other attribute of ownership of any kind or nature whatsoever affecting or attached to any asset.

“Loss” means, with respect to any Person, any cost, damage (including incidental and consequential damages as well as any diminution in value, including as to Company Units), expense, Liability, loss, injury, deficiency and Tax, including interest, penalties, fees, fines, reasonable out-of-pocket legal, accounting and other professional fees and reasonable out-of-pocket expenses incurred in the investigation, collection, prosecution, determination, defense and settlement of such Losses (including, in each case, in connection with the enforcement of any claim for indemnification hereunder), that is incurred or suffered by such Person; provided, that “Losses” shall not include punitive damages (unless such punitive damages are payable in connection with a Third Party Claim).

“Material Adverse Effect” means with respect to the Company or Buyer, as applicable, any fact, condition, event, occurrence, change, circumstance or effect that, individually or in the aggregate with all other facts, conditions, changes, circumstances and effects with respect to which such defined term is used in this Agreement, has, or would reasonably be expected to (i) have a material adverse effect on the business, assets, operations, results of operations, or financial condition of such Party, or (ii) materially and adversely impair such Party’s ability to perform its obligations under this Agreement without material delay, or to consummate the Transactions; provided, however, that any determination of whether there has been a Material Adverse Effect shall not include any adverse effect, change, event, occurrence or state of facts (whether short term or long term): (s) that generally affects the industry or geography in which the Company or Buyer, as applicable, operates so long as such Party is not disproportionately affected thereby relative to other participants in such industry or geography; (t) that results from general economic or political conditions in any country where such Party’s business is conducted so long as such Party is not disproportionately affected relative to the other companies therein; (u) arising out of or attributable to any changes in financial, banking or securities markets in general, including any disruption thereof and any decline in the price of any security or any market index or any change in prevailing interest rates; (v) arising out of or attributable to any acts of war (whether or not declared), armed hostilities.
or terrorism, or the escalation or worsening thereof; (w) consisting of any changes in applicable Laws, regulations, rules, orders, or other binding directives issued by any Governmental Authority, or accounting rules (including GAAP) or the enforcement, implementation or interpretation thereof; (x) consisting of any natural or man-made disaster or acts of God; (y) consisting of any failure by such Party to meet any internal or published projections, forecasts or revenue or earnings predictions (provided that the underlying causes of such failures (subject to the other provisions of this definition) shall not be excluded); or (z) that results from the taking or announcement of any action (or inaction) specifically contemplated or required to be taken by this Agreement; including the announcement or consummation of the Transactions or any action (or inaction) that Buyer has expressly requested or to which Buyer has consented in writing.

“Net Working Capital Threshold” means $0.

“Nonqualified Deferred Compensation Plan” has the meaning given such term in Section 409A(d)(1) of the Code.

“Order” means any Law, order, injunction (whether temporary, preliminary or permanent), judgment, decree, assessment, award or ruling enacted, promulgated, issued, entered, amended or enforced by any Governmental Authority.

“Ordinary Course of Business” means the ordinary course of business of the Company consistent with past practice in nature and amount.

“Permit” means any permit, license, franchise, certificate, accreditation approval, registration, notification or authorization from any Governmental Authority, or required by any Governmental Authority to be obtained, maintained or filed.

“Permitted Liens” means: (i) statutory liens with respect to the payment of Taxes, in all cases which are not yet due or payable or that are being contested in good faith by appropriate actions and for which appropriate reserves with respect thereto have been specifically established on the books and records of the Company to the extent required in accordance with GAAP; and (ii) statutory liens of landlords, suppliers, mechanics, carriers, materialmen, warehousemen, service providers or workmen and other similar Liens imposed by Law created in the Ordinary Course of Business the existence of which could not constitute a default or breach under any of the Company’s Contracts for amounts that are not yet delinquent and are not, individually or in the aggregate significant; (iii) building, zoning, entitlement and other land use regulations imposed by any Governmental Authority with jurisdiction over the Leased Real Property which are not violated by the current use or occupancy of such Leased Real Property, and (iv) easements, conditions, covenants and restrictions that are of record with respect to the Leased Real Property which are not violated by the current use or occupancy of such Leased Real Property or the operation of the Company’s business or that do not and shall not adversely affect the value, or impair the use or current occupancy of the Leased Real Property.

“Person” means any natural person, corporation, limited liability company, partnership, association, trust or other entity, including a Governmental Authority.
“Personal Data” means, as applicable, (i) any and all information about an individual that either contains data elements that identify the individual or with respect to which there is a reasonable basis to believe the information can be used to identify the individual, (ii) any information that enables a Person to contact the individual (such as information contained in a cookie or an electronic device fingerprint) and (iii) any and all other information, the collection, use, sharing, transfer or other processing of which is regulated by any applicable Law in relation to data protection, data privacy or personal privacy, including personal healthcare information. Personal Data includes (v) personal identifiers such as name, address, Social Security Number, date of birth, driver’s license number or state identification number, Taxpayer Identification Number and passport number, (w) financial information, including credit or debit card numbers, account numbers, access codes, consumer report information and insurance policy number, (x) demographic information, (y) unique biometric data, such as fingerprint, retina or iris image, voice print or other unique physical representation and (z) individual medical or health information (including information of patients, customers, employees, workers, contractors, and third parties who have provided information to the Company, and including information relating to services provided by or to third parties).

“Personal Data Obligations” means the Company’s privacy policies (or applicable terms of use) as published on any Company websites or mobile applications or any other privacy policies (or applicable terms of use), Contracts, documents or promises or representations agreed to with employees, consumers or customers, or other Persons, and any applicable Laws, or applicable industry standards, regarding Collection and Use of Personal Data, including but not limited to Laws regarding the use of Personal Data for marketing communications such as the CAN SPAM Act of 2003.

“Pre-Closing Tax Period” means (i) any taxable period ending on or before the Closing Date and (ii) with respect to a Straddle Period, any portion thereof ending on and including the Closing Date.

“Premises” means any building, plant, improvement or structure located on the Leased Real Property.

“Products and Services” means any product or service that the Company currently offers or sells.

“Proprietary Software” means any Software that is owned by Company and is related to the Company’s Business as conducted by the Company.

“Public Software” means any software that is (i) distributed as free software or as open source software (e.g., Linux), (ii) subject to any licensing or distribution model that includes as a term thereof any requirement for distribution of source code to licensees or third parties, patent license requirements on distribution, restrictions on future patent licensing terms, or other abridgement or restriction of the exercise or enforcement of any Company Intellectual Property Rights through any means, (iii) licensed or distributed under any Public Software License or under less restrictive free or open source licensing and distribution models such as those obtained under the BSD, MIT, Boost Software License and the Beer-Ware Public Software Licenses or any similar
licenses, (iv) a public domain dedication or (v) a derivative work of any software described in (i) through (iv) above.

“Public Software License” means any of the following licenses or distribution models, or licenses or distribution models similar to any of the following: (i) GNU’s General Public License (GPL) or Lesser/Library GPL (LGPL); (ii) the Artistic License (e.g., PERL); (iii) the Mozilla Public License; (iv) the Netscape Public License; (v) the Sun Community Source License (SCSL); (vi) the Sun Industry Standards License (SISL); (vii) the Apache License; and (viii) any licenses that are defined as OSI (Open Source Initiative) licenses as listed on the Opensource.org website.

“Restrictive Term” means the period commencing on the Closing Date and ending on [*].

“Reference Date” means March 13, 2018.

“Related Party” means (i) any current or former director (or nominee), or officer of the Company, (ii) any Company Unitholder and (iii) any relative, spouse, officer, director or Affiliate of any of the foregoing Persons.

“Release” means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, disposing of or migrating into or through the environment or any natural or man-made structure.

“Representatives” means, with respect to any Person, the officers, employees, investment bankers, financial advisors, attorneys, accountants, agents and other representatives of such Person.

“SEC” means the United States Securities and Exchange Commission.

“Securities Act” means the Securities Act of 1933, as amended.

“Seller Fundamental Representations” means each of the representations and warranties contained in Section 3.1 (Title), Section 3.2 (Authority), Section 3.6 (No Broker and No Transaction Expenses), Section 3.7 (Investment), Section 3.8 (Taxes), Section 4.1(a) (Valid Existence; Good Standing), Section 4.1(c) (Subsidiaries), Section 4.1(d) (Corporate Documents), Section 4.3 (Capitalization), Section 4.9 (Taxes), Section 4.15 (Intellectual Property; Technology; Privacy and Security; Information Systems; Disaster Recovery), and Section 4.20 (Brokers and Other Advisors).

“Seller Indemnified Persons” means the Sellers and their Affiliates and each of their respective equity holders, directors, officers, employees, agents, successors and assigns.

“Sellers’ Representative Expenses” means any and all losses, liabilities, damages, claims, penalties, fines, forfeitures, actions, fees, costs and expenses of any nature (including the reasonable fees and expenses of counsel and experts and their staffs and all expense of document location, duplication and shipment) arising out of or in connection with the Sellers’ Representative’s execution and performance of this Agreement and any agreements ancillary hereto.

“Software” means computer software programs and software systems, including all databases, compilations, tool sets, compilers, higher level or “proprietary” languages, related
documentation and materials (including all Source Code Materials), whether in source code, object code or human readable form, and all software programs and software systems that are classified as work-in-progress on the Closing Date.

“Source Code Materials” as it pertains to source code of any Software means: (i) the software, tools and materials utilized for the operation, development and maintenance of the Software; (ii) documentation describing the names, vendors and version numbers of (x) the development tools used to maintain or develop the Software and (y) any third-party software or other applications that form part of the source code version of the Software and are required in order to compile, assemble, translate, bind and load the Software into executable releases; (iii) all programmers’ notes, bug lists and technical information, systems and user manuals and documentation for the Software, including all job control language statements, descriptions of data structures, flow charts, technical specifications, schematics, statements or principles of operations, architecture standards and annotations describing the operation of the Software; and (iv) all test data, test cases and test automation scripts used for the testing and validating the functioning of the Software.

“Straddle Period” means any taxable period that includes (but does not end on) the Closing Date.

“Subsidiary” means, with respect to a Party, any corporation, limited liability company, partnership, association, trust or other entity the accounts of which would be consolidated with those of such Party in such entity’s consolidated financial statements if such financial statements were prepared in accordance with GAAP, as well as any other corporation, limited liability company, partnership, association, trust or other entity of which securities or other ownership interests representing more than 50% of the equity or more than 50% of the ordinary voting power (or, in the case of a partnership, more than 50% of the general partnership interests) are, as of such date, owned by such Party or one or more Subsidiaries of such Party.

“Tax” or “Taxes” means (i) any or all federal, state, local or foreign taxes or other assessments in the nature of taxes imposed by a Taxing Authority, including all net income, gross receipts, capital, sales, use, ad valorem, value added, transfer, franchise, profits, inventory, capital stock, withholding, payroll, employment, social security, unemployment, excise, severance, stamp, occupation, property and estimated taxes, and (ii) any or all interest, penalties or additions to tax imposed by any Taxing Authority in connection with any item described in clause (i).

“Tax Returns” means, with respect to Taxes, any return, report, claim for refund, estimate, information return or statement, declaration of estimated Tax or other similar document filed or required to be filed with any Taxing Authority with respect to Taxes, including any schedule or attachment thereto and including any amendment thereof.

“Tax Sharing Agreement” means any agreement relating to the sharing, allocation or indemnification of Taxes or amounts in lieu of Taxes, or any similar Contract or arrangement, other than any Contract or arrangement entered into in the Ordinary Course of Business the purpose of which is not primarily related to Taxes.
“Taxing Authority” means any Governmental Authority responsible for the administration, assessment and collection of any Taxes.

“Technology” means all inventions, works, discoveries, innovations, know-how, information (including ideas, research and development, formulas, algorithms, compositions, processes and techniques, data, designs, drawings, specifications, customer and supplier lists, pricing and cost information, business and marketing plans and proposals, graphics, illustrations, artwork, documentation and manuals), databases, computer software, firmware, computer hardware, integrated circuits and integrated circuit masks, electronic, electrical and mechanical equipment and all other forms of technology, including improvements, modifications, works in process, derivatives, or changes, whether tangible or intangible, embodied in any form, whether or not protectable or protected by patent, copyright, mask work right, trade secret law, or otherwise and all documents and other materials recording any of the foregoing.

“Third Party Claim” refers to any Action that is instituted, or any claim that is asserted, by any Person not a Party to this Agreement in respect of an indemnifiable matter under this Agreement.

“Total Purchase Price” means the sum of (i) the Final Purchase Price, plus (ii) the aggregate value of Earnout Shares issued pursuant to Section 2.1(b)(v).

“Trailing Average Share Price” means the average closing price for shares of Buyer’s Common Stock on the New York Stock Exchange (or any other exchange which is then the primary exchange upon which shares of Buyer’s Common Stock are traded) for the twenty (20) trading day period immediately preceding applicable date of determination, as adjusted by any stock split, division or subdivision of shares, stock dividend, reverse stock split, consolidation of shares, reclassification, recapitalization or other similar transaction with respect to shares of Buyer’s Common Stock during such twenty (20) trading day period.

“Transactions” means any transaction or arrangement contemplated by this Agreement, including (i) the Unit Purchase and the other transactions and arrangements described in the recitals to this Agreement, and (ii) the payment of fees and expenses relating to such transactions by the Company and the Sellers.

“Upfront Per Unit Stock Consideration” means the quotient of (i) the Upfront Stock Consideration Shares, divided by (ii) the number of Company Units issued and outstanding immediately prior to the Closing (including all Company Units issued as a result of the Note Conversions).

“Upfront Purchase Price” means the sum of (i) the Base Purchase Price, minus (ii) the estimated Company Debt, minus (iii) the amount, if any, by which the Net Working Capital Threshold exceeds the estimated Closing Net Working Capital, plus (iv) the amount, if any, by which the estimated Closing Net Working Capital exceeds the Net Working Capital Threshold.

“Upfront Stock Consideration Shares” means a number of shares of Buyer’s Common Stock equal to the quotient of (i) the sum of (x) the Upfront Purchase Price minus (y) the Indemnification
Hold-Back Amount *minus* (z) the Expense Fund Amount, *divided by* (ii) the Trailing Average Share Price calculated as of the Agreement Date.

“YouScript” means YouScript Incorporated, a Delaware corporation.

**Terms Defined Elsewhere in this Agreement.**

For purposes of this Agreement, the following terms have meanings set forth at the section of this Agreement indicated opposite such term:

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**ARTICLE II**

**THE CONTEMPLATED TRANSACTIONS**

2.1 **Purchase and Sale of the Units.**

(a) Upon the terms and subject to the conditions set forth in this Agreement, at the Closing, each Seller shall sell, transfer and deliver to Buyer, and Buyer shall purchase from each Seller, all of such Seller’s Company Units (including all Company Units issued as a result of the Note Conversions) as set forth on the Allocation Schedule, which Company Units shall be sold to Buyer free and clear of all Liens (other than Liens arising under applicable securities laws).

(b) In full payment for the Company Units of such Seller and subject to the provisions of this Agreement (including the Offset Right), Buyer shall deliver to each Seller the following in respect of each such Company Unit:

(i) within three (3) Business Days after the Closing Date, a book entry reflecting an amount of shares of Buyer’s Common Stock equal to the Upfront Per Unit Stock Consideration;

(ii) a book entry reflecting an amount of shares of Buyer’s Common Stock equal to the quotient of (x) the Indemnification Hold-Back Amount, to the extent released to the Sellers as provided herein, divided by (y) the Trailing Average Share Price calculated as of the Agreement Date, divided by (z) the number of Company Units issued and outstanding immediately prior to the Closing (including all Company Units issued as a result of the Note Conversions);

(iii) If the Post-Closing Adjustment is a positive number, an amount of cash equal to the quotient of (x) the Post-Closing Adjustment, divided by (y) the number of Company Units.
Units issued and outstanding immediately prior to the Closing (including all Company Units issued as a result of the Note Conversions);

(iv) an amount of cash equal to up to the quotient of (x) the Expense Fund Amount, to the extent released to the Sellers as provided herein, divided by (y) the number of Company Units issued and outstanding immediately prior to the Closing (including all Company Units issued as a result of the Note Conversions); and

(v) within ten (10) Business Days after Buyer files with the SEC its quarterly report on Form 10-Q or its annual report on Form 10-K, in each case during the Earnout Period, a book entry reflecting an amount of shares of Buyer’s Common Stock (the “Earnout Shares”) equal to the quotient of (x) the Earnout Revenue actually received by Buyer during the fiscal quarter with respect to which such periodic report is filed (noting, in the instance of any Form 10-K, that the applicable quarter is the fourth quarter of the Company’s fiscal year at issue), divided by (y) the Trailing Average Share Price calculated as of the applicable Earnout Date, divided by (z) the number of Company Units issued and outstanding immediately prior to the Closing (including all Company Units issued as a result of the Note Conversions).

2.2 No Fractional Shares; Offset Right. Notwithstanding any provision herein to the contrary (i) no fractional shares of Buyer’s Common Stock shall be issued pursuant to this Article II (with the intended effect that any shares of Buyer’s Common Stock shall be rounded up to the nearest whole number, except in respect of Earnout Shares as to which fractional shares will be carried forward and rounded up only with the final payout in the Earnout Period); (ii) the total number of shares of Buyer’s Common Stock issuable pursuant to this Agreement shall be capped at 19,693,315 shares (as adjusted by any stock splits, divisions or subdivisions of shares, stock dividends, reverse stock splits, consolidations of shares, reclassifications, recapitalizations or other similar transactions with respect to shares of Buyer’s Common Stock occurring after the Closing Date); (iii) if, when shares of Buyer’s Common Stock would otherwise be distributed pursuant to Section 2.1(b)(ii) and Section 2.1(b)(v), respectively, there shall exist a good faith claim by Buyer to exercise the Offset Right, then all or a portion of such shares as determined by Buyer (in its reasonable discretion) to represent the Losses at issue (including, if applicable, as to any specific Sellers), subject to the restrictions set forth in Section 9.3, shall be withheld from payment until such time as the claim has been perfected, in which case the Offset Right shall apply against such portion of the shares at issue and the balance of any withheld portion (if applicable) shall be distributed to the Sellers (or, as applicable, to the affected Sellers) as contemplated by this Agreement; and (iv) no Seller may assign or transfer any right to receive shares of Buyer’s Common Stock or cash pursuant to this Agreement without the prior written consent of Buyer (which may be withheld in Buyer’s sole discretion).

2.3 Other Closing Payments. At the Closing, Buyer shall make, or cause to be made, the following additional payments, by wire transfer of immediately available funds:

(a) to each holder of Company Debt, the aggregate amount of Company Debt owed to such holder as of the Closing (the principal amounts of which are set forth on Section 4.5(h) of the Disclosure Schedule) pursuant to a payoff letter from such holder (i) indicating the amount
required to discharge such Company Debt in full (the “Payoff Amount”) and (ii) agreeing to release applicable Liens upon receipt of the applicable Payoff Amount;

(b) to the payees thereof, the Company Transaction and Bonus Expenses, in each case as directed in writing by the Company to the Buyer pursuant to invoices or other evidence reasonably satisfactory to Buyer, except that Buyer shall cause Change in Control Payments to Employees to be paid through the Company’s payroll system; and

(c) to the Sellers’ Representative, the Expense Fund Amount in accordance with wire instructions delivered to Buyer prior to the Closing.

2.4 Closing. The closing of the Transactions (the “Closing”) shall take place at 10:00 a.m. (San Francisco time) on the later of (i) April 1, 2020 or (ii) the second Business Day following the satisfaction or waiver of the conditions set forth in Article VII (other than those conditions that by their nature are to be satisfied at the Closing, but subject to the satisfaction or waiver of those conditions at such time) at the offices of Pillsbury Winthrop Shaw Pittman LLP, 12255 El Camino Real, Suite 300, San Diego, California 92130, unless another time, date or place is agreed to in writing by the Parties (the “Closing Date”).

2.5 Delivery of Calculations. Not less than two (2) Business Days prior to the Closing Date, the Sellers shall cause the Company to prepare and deliver to Buyer the following for Buyer’s review:

(a) the Company’s calculation of the Upfront Purchase Price, setting forth, in reasonable detail, an estimation of each component thereof;

(b) the Company’s calculation of the Upfront Stock Consideration Shares and the Upfront Per Unit Stock Consideration; provided that Buyer will provide (and Sellers may rely upon) the calculation of the Trailing Average Share Price calculated as of the Agreement Date;

(c) a schedule of all Company Units (including all Company Units issued as a result of the Note Conversions), including the name of the Seller holding each of the Company Units;

(d) the Company’s estimated balance sheet as of immediately prior to the Closing (the “Estimated Balance Sheet”), with separate schedules reflecting (i) the estimated Closing Cash, (ii) the estimated Company Debt, (iii) the estimated Company Transaction and Bonus Expenses and (iv) the estimated Closing Net Working Capital as well as the delta between the estimated Closing Net Working Capital and the Net Working Capital Threshold;

(e) the name, address and tax identification number of each Seller and:

(i) in the instance of the Sellers, the amount of Buyer’s Common Stock to be issued to each Seller pursuant to Section 2.1(b)(i), as well as the potential shares issuable and potential cash payable to each Seller pursuant to Sections 2.1(b)(ii) and 2.1(b)(iv), respectively;
(f) the Company’s calculation of the amount of Taxes required to be withheld from any payments to each Seller under this Agreement; and

(g) a certificate of a duly authorized officer of the Company certifying the foregoing deliverables (i.e., clauses (a) through (f)).

The Sellers shall cause the Company to assist Buyer in the review of the calculations listed in the foregoing Sections 2.5(a) through 2.5(f) and will consider in good faith any comments from Buyer regarding such calculations and the amounts set forth therein.

The calculations listed in the foregoing Sections 2.5(a) through 2.5(f) shall be set forth on a spreadsheet referred to herein as the “Allocation Schedule”. The Parties agree that Buyer and the Company will have the right to rely on the Allocation Schedule as setting forth a true, complete and accurate listing of all amounts due to be paid by Buyer to the Sellers in exchange for Company Units (including all Company Units issued as a result of the Note Conversions) provided that Buyer will provide (and Sellers may rely upon) the calculation of the Trailing Average Share Price calculated as of the Agreement Date. Neither Buyer nor the Company will have any liability with respect to the allocation of any shares of Buyer’s Common Stock or cash made to the Sellers in accordance with the Allocation Schedule. Notwithstanding anything in this Agreement to the contrary, the Estimated Balance Sheet and the Company’s estimation of the Closing Net Working Capital shall be consistent with the Accounting Methodology and, with respect to the Closing Net Working Capital, the sample calculation attached hereto as Exhibit A.

2.6 Withholding. Notwithstanding anything in this Agreement to the contrary, Buyer and the Company shall be entitled to deduct and withhold from that portion of any payments contemplated by this Article II or any other amount payable to a Seller pursuant to this Agreement, and shall pay to the appropriate Taxing Authority, such amounts that are required to be deducted and withheld with respect to the making of such payments under any Tax Law. To the extent amounts are so deducted and withheld and paid to the appropriate Taxing Authority, such amounts shall be treated for purposes of this Agreement as having been paid to the Seller in respect of which such deduction and withholding were made.

2.7 Post-Closing Adjustment.

(a) Preparation of Closing Statement. Within ninety (90) days following the Closing Date, Buyer shall prepare and deliver to Sellers’ Representative a statement as of the Closing (the “Final Calculation”) setting forth its calculation of each of the following:

(i) the Closing Cash;

(ii) the Closing Net Working Capital;

(iii) the Company Transaction and Bonus Expenses;

(iv) the Company Debt; and

(v) the resulting Final Purchase Price.
The Final Calculation shall be accompanied by such supporting documentation reasonably necessary to derive the numbers set forth therein. The Final Calculation shall be final, conclusive and binding upon the Parties unless Sellers’ Representative delivers a written notice to Buyer of any objection to the Final Calculation (the “Objection Notice”) within thirty (30) days (the “Objection Period”) after delivery of the Final Calculation. Any Objection Notice must set forth in reasonable detail (x) any item on the Final Calculation that Sellers’ Representative believes has not been prepared in accordance with this Agreement and the correct amount of such item and (y) Sellers’ Representative’s alternative calculation of the Closing Cash, the Closing Net Working Capital, the Company Transaction and Bonus Expenses or Company Debt, as the case may be. Any Objection Notice must specify, with reasonable particularity, all facts and all documents relied upon by Sellers’ Representative that form the basis of such disagreements. If Sellers’ Representative gives any such Objection Notice within the Objection Period, then Sellers’ Representative and Buyer shall attempt in good faith to resolve any dispute concerning the item(s) subject to such Objection Notice. If Sellers’ Representative and Buyer do not resolve the issues raised in the Objection Notice within thirty (30) days of the date of delivery of such notice (the “Initial Resolution Period”), such dispute shall be resolved in accordance with the procedures set forth in Section 2.7(b). Any item or amount which has not been disputed in the Objection Notice shall be final, conclusive and binding on the Parties on the expiration of the Initial Resolution Period.

(b) Resolution of Disputes. If Buyer and Sellers’ Representative have not been able to resolve a dispute within the Initial Resolution Period, either Party may submit such dispute to and such dispute shall be resolved fully, finally and exclusively through the use of an independent international accounting firm selected to serve as such by mutual agreement of Buyer and Sellers’ Representative (such accounting firm, the “Reviewing Party”). The fees and expenses of the Reviewing Party incurred in the resolution of such dispute shall be borne by the parties in such proportion as is appropriate to reflect the relative benefits received by the Sellers and Buyer from the resolution of the dispute. For example, if Sellers’ Representative challenges the calculation in the Final Calculation by an amount of $100,000, but the Reviewing Party determines that Sellers’ Representative has a valid claim for only $40,000, Buyer shall bear 40% of the fees and expenses of the Reviewing Party and Sellers’ Representative on behalf of the Sellers shall bear the other 60% of such fees and expenses. The Reviewing Party shall determine (with written notice thereof to Sellers’ Representative and Buyer) as promptly as practicable, but in any event within thirty (30) days following the date on which Final Calculation and written submissions detailing the disputed items are delivered to the Reviewing Party (i) whether the Final Calculation was prepared in accordance with the terms of this Agreement or, alternatively, (ii) only with respect to the disputed items submitted to the Reviewing Party, whether and to what extent (if any) the Final Calculation requires adjustment and a written explanation in reasonable detail of each such required adjustment, including the basis therefor (it being understood that any determination of a disputed item shall be not greater or less than the amount of such disputed item as proposed by Buyer in the Final Calculation or as proposed by Sellers’ Representative in the Objection Notice). Buyer and Sellers’ Representative shall require the Reviewing Party to enter into a confidentiality agreement on terms agreeable to Buyer, Sellers’ Representative and the Reviewing Party. The procedures of this Section 2.7(b) are exclusive and the determination of the Reviewing Party shall be final and binding on the Parties. The decision rendered pursuant to this Section 2.7(b) may be filed as a judgment in any court of competent jurisdiction.
(c) **Post-Closing Purchase Price Adjustment.**

(i) The “Post-Closing Adjustment” shall be an amount equal to the Final Purchase Price less the Upfront Purchase Price and, for the avoidance of doubt, may be a positive or a negative number or zero.

(ii) Without limiting the provisions of Section 9.2(a)(i) (except to the extent of any double counting that would otherwise result), if the Post-Closing Adjustment is a negative number, the Indemnification Hold-Back Amount shall be reduced by the absolute value of the Post-Closing Adjustment (i.e., offsetting the Post-Closing Adjustment against the Indemnification Hold-Back Amount).

(iii) If the Post-Closing Adjustment is a positive number, Buyer shall deliver to the Sellers in accordance with the Allocation Schedule cash in an amount equal to the Post-Closing Adjustment.

(d) **No Effect on Representations and Warranties.** The provisions of this Section 2.7(d), as well as any adjustment to the Final Purchase Price as a result of any of the Closing Cash, the Closing Net Working Capital, the Company Transaction and Bonus Expenses and the Company Debt, shall not diminish or otherwise affect the right or ability of Buyer or any other Buyer Indemnified Person to rely upon the provisions of this Agreement and any certificate or document delivered in connection herewith, including the representations of the Sellers set forth in Article III and Article IV (except to the extent of any double counting that would otherwise occur).

2.8 **Indemnification Hold-Back Amount and Payment.** On the date that is twelve (12) months following the Closing Date (such date, the “Indemnification Hold-Back Payment Date”), Buyer shall deliver to the Sellers in accordance with the Allocation Schedule the remaining Indemnification Hold-Back Shares (reflecting any reductions to the Indemnification Hold-Back Shares made in accordance with Section 2.7(c)(ii) or Article IX); provided, however, that if, when any amount would otherwise be distributed pursuant to this Section 2.8, there shall exist a good faith claim by Buyer to exercise the Offset Right, all or a portion of such amount as determined by Buyer (in its reasonable discretion) to represent the Losses at issue (including, if applicable, as to any specific Seller) shall be withheld from payment until such time as the claim has been finally resolved, in which case the Offset Right shall apply against such portion of the amount at issue and the balance of any withheld portion (if applicable) shall be distributed to the Sellers (or, as applicable, to the affected Sellers) as contemplated by this Agreement.

2.9 **Earnouts.** Notwithstanding any provision in this Agreement to the contrary, (i) Buyer and its Affiliates (including the Company following the Closing) may devote only such efforts to obtaining an LCD for a pharmacogenetic testing product (such that it becomes an Approved Product) as Buyer deems advisable in its sole discretion, and neither Buyer nor any of its Affiliates (including the Company following the Closing) shall have any liability whatsoever in the event that [*] prior to March 31, 2025 and any shares of Buyer’s Common Stock that would otherwise become distributable or payable pursuant to Section 2.1(b)(v) do not become distributable or payable as a result, (ii) Buyer and its Affiliates (including the Company following the Closing) may devote only such efforts to commercializing, selling, licensing or otherwise engaging in any revenue-generating
activities in respect of any Approved Product as Buyer deems advisable in its sole discretion, and neither Buyer nor any of its Affiliates (including the Company following the Closing) shall have any liability whatsoever in the event that either (x) no Earnout Revenue is generated or (y) less than any amount of Earnout Revenue anticipated by any Party is generated, and in either case any shares of Buyer’s Common Stock that would otherwise become distributable or payable pursuant to Section 2.1(b)(v) do not become distributable or payable as a result, and (iii) Buyer, in its sole discretion, may elect among the following alternatives (with notice to the Sellers’ Representative) in the event of (a) the consummation of a merger of Buyer or a subsidiary of Buyer with or into another entity if persons who were not stockholders of Buyer immediately prior to such merger own immediately after such merger 50% or more of the voting power of the outstanding securities of each of Buyer (or its successor) and any direct or indirect parent corporation of Buyer (or its successor) or (b) the sale, transfer or other disposition of all or substantially all of Buyer’s assets: (1) conversion to cash payouts (in the amount of the Earnout Shares otherwise at issue) of any shares of Buyer’s Common Stock otherwise distributable pursuant to Section 2.1(b)(v); (2) assumption by any acquirer (or its parent entity) of the obligation to issue any shares of stock pursuant to Section 2.1(b)(v) (i.e., thereafter such shares to be in the form of shares of such acquirer’s (or its parent entity’s) common stock, with such changes to be made in the applicable share calculation and payout provisions as are reasonably appropriate in such circumstance), so long as such stock is listed on a national securities exchange; or (3) any combination of the foregoing; provided that Buyer shall not take any actions for the primary intended purpose of reducing the amount of Earnout Shares issuable to the Sellers pursuant to this Agreement.

ARTICLE III

REPRESENTATIONS AND WARRANTIES WITH RESPECT TO EACH SELLER

Each of the Sellers hereby, severally and not jointly, represents and warrants to Buyer as of the Agreement Date and as of the Closing Date as follows:

3.1 Title. Such Seller has sole record and beneficial ownership of all of the Company Units (including Company Units issued as a result of the Note Conversions) set forth opposite such Seller’s name on Schedule 1 attached hereto. The Company Units set forth opposite such Seller’s name on Schedule 1 attached hereto represent all of such Seller’s outstanding ownership interest in the Company (whether vested or unvested). Aside from the Company Units set forth opposite such Seller’s name on Schedule 1 attached hereto, such Seller has no current or future right to (nor have any promises or inducements been made to such Seller with respect to) any equity, profits interests or other ownership interest in the Company.

3.2 Authority. Such Seller has all requisite power and full legal right to enter into this Agreement and to perform all of such Seller’s agreements and obligations hereunder. This Agreement has been duly executed and delivered by such Seller and, subject to due execution and delivery by the other Parties, constitutes the legal, valid and binding obligation of such Seller, enforceable against such Seller in accordance with its terms, except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, or other laws of general application relating to or affecting the enforcement of creditors’ rights generally, or (ii) as
limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

3.3 **Non-Contravention.** The execution and delivery of this Agreement by such Seller and the consummation by such Seller of the transactions contemplated hereby will not constitute a material violation of, or be in conflict in any material respect with, any Order applicable to such Seller.

3.4 **Governmental Consents.** Except as set forth in Section 3.4 of the Disclosure Schedule, no consent, approval or authorization of, or registration, qualification or filing with, any Governmental Authority is required for the execution and delivery by such Seller of this Agreement or the consummation by such Seller of the transactions contemplated hereby.

3.5 **Litigation.** There is no Action pending or, to such Seller’s Knowledge, threatened which in any manner challenges or seeks to prevent, enjoin, materially alter or materially delay the consummation by such Seller of the transactions contemplated by this Agreement.

3.6 **No Broker and No Transaction Expenses.** No finder, broker, agent or other similar intermediary has acted for or on behalf of such Seller in connection with the negotiation of this Agreement or the consummation of the transactions contemplated hereby. Such Seller has not engaged any third party advisor for which the Company will have any liability, including brokers, finders, financial advisors, accountants, counsel and any other third party service providers, arising from, incurred in connection with or incident to the process by which the Company, such Seller (as applicable) and, to such Seller’s Knowledge, any other Seller solicited, discussed and negotiated strategic alternatives and/or this Agreement and the transactions contemplated hereby.

3.7 **Investment.**

(a) Such Seller (i) has experience investing in unregistered and restricted securities of speculative and high risk companies, (ii) has such knowledge and experience in financial and business matters that such Seller is capable of evaluating the merits and risks of an acquisition of shares of Buyer’s Common Stock as represented hereby, (iii) by reason of such Seller’s financial and business experience, has the capacity to protect such Seller’s interest in connection with the acquisition of shares of Buyer’s Common Stock as represented hereby, (iv) is financially able to bear the economic risk of an investment in shares of Buyer’s Common Stock as represented hereby, including the total loss thereof, (v) is either (x) an individual or (y) a Person that is not an individual and was not formed solely for the purpose of acquiring shares of Buyer’s Common Stock, (vi) has received and reviewed all information such Seller considers necessary or appropriate for deciding whether to invest in shares of Buyer’s Common Stock, (vii) has had an opportunity to ask questions and receive answers from Buyer and its officers and employees regarding an investment in shares of Buyer’s Common Stock and regarding the business, financial affairs and other aspects of Buyer, and (viii) has further had the opportunity to obtain any information (to the extent Buyer possesses or can acquire such information without unreasonable effort or expense) which such Seller deems necessary to evaluate an investment in shares of Buyer’s Common Stock and to verify the accuracy of information otherwise provided to such Seller.
(b) Such Seller is an “accredited investor” as defined in Rule 501(a) of Regulation D under the Securities Act.

(c) Such Seller acknowledges and understands that (i) the shares of Buyer’s Common Stock issuable to such Seller as contemplated hereby have not been registered under the Securities Act in reliance, in part, on the representations and warranties of Seller in this Section 3.7(c) and (ii) such shares are being acquired by such Seller for investment purposes for such Seller’s own account only and not for sale or with a view to distribution of all or any part of such shares. Such Seller has no present plan or intention to sell, exchange or otherwise dispose of any of the shares of Buyer’s Common Stock issuable to such Seller as contemplated hereby.

(d) Such Seller understands (i) that the shares of Buyer’s Common Stock issuable to such Seller as contemplated hereby are “restricted securities” under the federal securities laws in that such shares will be acquired from Buyer in a transaction not involving a public offering, and that under such laws and applicable regulations such shares may be resold without registration under the Securities Act only in certain limited circumstances and that otherwise such shares must be held indefinitely, and (ii) the resale limitations imposed by the Securities Act as well as Rule 144 ("Rule 144") of the SEC and the conditions which must be met in order for Rule 144 to be available for resale of “restricted securities,” including the requirement that the shares of Buyer’s Common Stock issuable to such Seller as contemplated hereby, unless registered for resale under the Securities Act, must be held for at least six (6) months after issuance from Buyer (or (1) year in the absence of publicly available information about Buyer) and the condition that there be available to the public current information about Buyer under certain circumstances.

(e) Such Seller further agrees not to make any disposition of all or any portion of the shares of Buyer’s Common Stock issuable to such Seller as contemplated hereby unless and until: (i) there is then in effect a registration statement under the Securities Act covering such proposed disposition and such disposition is made in accordance with such registration statement, any applicable requirements of state securities laws, and any applicable Buyer policies concerning trading blackout periods; or (ii) such Seller shall have notified Buyer of the proposed disposition and shall have furnished Buyer with a detailed statement of the circumstances surrounding the proposed disposition, and if reasonably requested by Buyer, such Seller shall have furnished Buyer with a written opinion of counsel, reasonably satisfactory to Buyer, that such disposition will not require registration of any securities under the Securities Act or the consent of or a permit from appropriate authorities under any applicable state securities law; provided, however, that (x) Buyer will not require opinions of counsel for transactions made pursuant to Rule 144 so long as Buyer is provided on a timely basis with all certificates and other information Buyer may reasonably request to permit Buyer to determine that the subject disposition is, in fact, exempt from the registration requirements of the Securities Act pursuant to Rule 144, (y) in addition to the other matters set forth in this paragraph, such Seller shall promptly forward to Buyer a copy of any Form 144 filed with the SEC with respect to any proposed disposition and a letter from the executing broker satisfactory to Buyer evidencing compliance with Rule 144, and (z) if Rule 144 is amended or if the SEC’s interpretations thereof in effect at the time of any proposed disposition have changed from its present interpretations thereof as of the Closing Date, such Seller shall provide Buyer with such additional documents and assurances as Buyer may reasonably require.
Such Seller understands that the book entries or certificates evidencing the shares of Buyer’s Common Stock issuable to such Seller as contemplated hereby may bear one or all of the following legends (or substantially similar legends):

(i) “THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. THEY MAY NOT BE SOLD, OFFERED FOR SALE, TRANSFERRED, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER SUCH ACT OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED OR UNLESS SOLD PURSUANT TO RULE 144 UNDER SUCH ACT.”

(ii) Any legend required by applicable state securities laws.

Such Seller understands and agrees that stop transfer instructions may be given to Buyer’s transfer agent with respect to the shares of Buyer’s Common Stock issuable to such Seller as contemplated hereby.

(g) Such Seller has carefully read the provisions of this Agreement, including the provisions of this Article III, and has discussed their requirements and other applicable limitations upon such Seller’s ability to sell, transfer or otherwise dispose of the shares of Buyer’s Common Stock issuable to such Seller as contemplated hereby (including, without limitation, the volume resale limitations set forth in Section 6.14), to the extent that such Seller felt necessary, with such Seller’s personal counsel.

3.8 Taxes. Seller has been advised to seek the advice of such Seller’s tax advisor and to make such Seller’s own determination with respect to this Agreement and the transactions contemplated hereby. By entering into this Agreement such Seller will bear any and all Liabilities for any Taxes (i) of such Seller, (ii) in respect of such Seller’s Company Units (including all Company Units issued as a result of the Note Conversions, and whether Taxes of the Company or such Seller), including as to the issuance of such Company Units to such Seller or the vesting of such Company Units, and (iii) in respect of the transactions contemplated by this Agreement to the extent applicable to Seller (including delivery of shares of Buyer’s Common Stock and cash to such Seller in payment for such Seller’s Company Units).

3.9 Release. Except as limited therein, such Seller knows of no claim that such Seller may have that has not been released pursuant to the provisions of Section 6.10.

ARTICLE IV

REPRESENTATIONS AND WARRANTIES OF THE SELLERS
WITH RESPECT TO THE COMPANY

Except as set forth on the Disclosure Schedule, the Sellers hereby represent and warrant to Buyer as of the Agreement Date and as of the Closing Date as follows:
4.1 **Organizational Matters.**

(a) **Valid Existence; Good Standing.** The Company is a limited liability company duly formed, validly existing and in good standing under the Laws of the State of Pennsylvania and has all requisite power and authority to own or lease all of its properties and assets and to carry on its business as now conducted. The Company is duly licensed or qualified to do business and is in good standing under the laws of Pennsylvania and each other jurisdiction in which the nature of the business conducted by it or the character or location of the properties and assets owned, leased or licensed by it makes such licensing or qualification necessary.

(b) **Operations.** Section 4.1(b) of the Disclosure Schedule lists each state and country in which the Company has any employee or officer (each a “Current Employee”) or has assets or leases Real Property. Current Employees, together with any former employees or officers of the Company, are referred to herein individually as an “Employee” and collectively as “Employees.” Section 4.1(b) of the Disclosure Schedule also lists each state and country in which the Company has any individual consultant or independent contractor or director (who is not an Employee) (each a “Current Consultant”) as of the Agreement Date. Current Consultants, together with any former individual consultant or independent contractor or director (who is not an Employee) of the Company, are referred to herein individually as a “Consultant” and collectively as “Consultants.”

(c) **Subsidiaries.** The Company has no Subsidiaries. The Company does not own and never has owned, directly or indirectly, any shares of capital stock, voting securities, or equity interests in any Person. The Company has no obligation to make an investment (in the form of a purchase of equity securities, loan, capital contribution or otherwise) directly or indirectly in any Person.

(d) **Corporate Documents.** The Company has delivered to Buyer true and complete copies of the Company’s Charter Documents. All such Charter Documents are unmodified and in full force and effect and the Company is not in violation of any provision of such Charter Documents. The Company’s members have not proposed or approved any amendment of any of the Company’s Charter Documents. The Company has delivered to Buyer and its representatives true and complete copies of the membership interests/unit ledger of the Company and of the minutes of all meetings of the members and each committee of the members of the Company held since the Reference Date to the extent minutes were kept or actions were taken at such meeting.

(e) **Officers and Members.** Section 4.1(e) of the Disclosure Schedule lists all of the members and officers of the Company as of the Agreement Date.

4.2 **Noncontravention.** Neither the negotiation, execution, delivery nor performance of this Agreement nor the consummation of the Transactions shall (i) conflict with or result in any violation of or default under (with or without notice or lapse of time, or both), (ii) give rise to a right of termination, cancellation, modification or acceleration of any obligation or loss of any benefit or result in the creation of any Lien upon any of the properties or assets of the Company or (iii) give rise to any Action by any Person (any such event, a “Conflict”) under or pursuant to (x) any provision of the Company’s Charter Documents or any resolutions adopted by the Company’s
members, (y) any Material Contract to which the Company is or has been a party or by which any of its properties or assets may be or may have been bound or affected (including, for this purpose, any Contract with the Company’s actual or potential clients, customers, partners or acquirers), or (z) any material Permit issued to the Company or any Order or Law applicable to the Company or any of its properties or assets (whether tangible or intangible). Following the Closing Date, the Company shall continue to be permitted to exercise all of its rights under all Material Contracts to which it is a party without the payment of any additional amounts or consideration other than ongoing fees, royalties or payments which the Company would otherwise be required to pay pursuant to the terms of such Material Contracts had the Transactions contemplated by this Agreement not occurred.

4.3 Capitalization.

(a) Authorized and Issued Securities. The capitalization of the Company is as follows: (i) 1,000,000 Company Units are issued and outstanding, and (ii) 428,571 Company Units are issuable in satisfaction of the Company Notes in connection with the Transactions. Except as set forth in this Section 4.3(a), there are no, and as of the Closing there shall be no, Company Units, voting securities or equity interests of the Company issued and outstanding or any subscriptions, options, profits units, warrants, calls, convertible or exchangeable securities, rights, commitments or agreements of any character providing for the issuance of any Company Units, voting securities or equity interests of the Company, including any representing the right to purchase or otherwise receive any Company Units.

(b) Ownership of Company Units and Company Notes. Section 4.3(b) of the Disclosure Schedule sets forth a complete and accurate list of each of the record holders of (i) all Company Units, (ii) all Company Notes and the principal amount, accrued but unpaid interest, grant date and maturity dates under each Company Note. All issued and outstanding Company Units are owned of record and beneficially, as set forth in Section 4.3(b) of the Disclosure Schedule.

(c) Valid Issuance; No Preemptive or Other Rights.

(i) All issued and outstanding Company Units (x) are, and all Company Units that may be issued pursuant to the conversion of the Company Notes shall be, when issued in accordance with the respective terms thereof, duly authorized, validly issued, fully paid and nonassessable, (y) are not subject to, nor were issued in violation of, any preemptive rights, rights of first offer or refusal, co-sale rights or similar rights arising under applicable Law or pursuant to the Company’s Charter Documents, or any Contract to which the Company is a party or by which it is bound and (z) have been offered, issued, sold and delivered by the Company in compliance with all registration or qualification requirements (or applicable exemptions therefrom) of applicable federal, state and foreign securities Laws. The Company is not under any obligation to register any of its presently outstanding securities, or securities issuable upon exercise or conversion of such securities, under the Securities Act or any other Law.

(ii) The rights, preferences and privileges of the Company Units are as set forth in the Company’s Charter Documents. There is no liability for distributions accrued and/or declared but unpaid with respect to the outstanding Company Units. The Company is not subject
to any obligation to repurchase, redeem or otherwise acquire any Company Units or any other voting securities or equity interests (or any options, profits interests, warrants or other rights to acquire any Company Units, voting securities or equity interests) of the Company. To the Company’s Knowledge, there are no voting trusts or other agreements or understandings with respect to the voting of the Company Units. There are no outstanding or authorized stock appreciation, phantom stock, profit participation, or other similar rights with respect to the Company.

4.4 No Consents or Approvals. Except as set forth in Section 4.4 of the Disclosure Schedule, no consents or approvals of, filings with, or notices to any Governmental Authority or counterparty to a Material Contract are required to be made or obtained by the Company in connection with the consummation of the Transactions and the operation of the Company’s business in the ordinary course after Closing, including with respect to the continued validity of the Company’s Permits.

4.5 Financial Matters.

(a) Financial Statements.

(i) Prior to the Agreement Date, the Company has delivered to Buyer true and complete copies of the following financial statements of the Company (collectively, the “Financial Statements”): (x) the unaudited balance sheet and related unaudited statements of income, cash flows and members’ equity as of and for the fiscal year ended December 31, 2019 (the “Balance Sheet Date”); and (y) the unaudited balance sheet and related unaudited statements of income, cash flows and members’ equity as of and for the two (2)-month period ended February 29, 2020 (the “Interim Balance Sheet” and such date the “Interim Balance Sheet Date”).

(ii) The books and records of the Company are complete, properly maintained and do not contain or reflect any material inaccuracies or discrepancies.

(b) Fair Presentation. The Financial Statements fairly present the financial condition of the Company as of such dates and the results of operations of the Company for such periods, and were derived from and are consistent with the books and records of the Company; provided, however, that the Financial Statements for interim periods are subject to normal year-end adjustments (which shall not be material individually or in the aggregate). Since the Reference Date, the Company has not effected any material change in any method of accounting or accounting practice.

(c) Internal Controls; Financial Controls. The Company maintains systems of internal accounting and financial reporting controls that are sufficient to provide reasonable assurance regarding the reliability of financial reporting, including policies and procedures sufficient to provide reasonable assurance: (i) that the Company maintains records that in reasonable detail accurately and fairly reflect the Company’s transactions and dispositions of assets; (ii) that receipts and expenditures are being made only in accordance with authorizations of management and the Company’s members; and (iii) regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company’s assets that could have a material effect on the Financial Statements. The Company has delivered to Buyer a true and complete copy of any disclosure (or,
if unwritten, a summary thereof) by any representative of the Company to the Company’s independent auditors relating to any material weaknesses in internal controls and any significant deficiencies in the design or operation of internal controls that would adversely affect the ability of the Company to record, process, summarize and report financial data. The Company has no Knowledge of any fraud or whistle-blower allegations, whether or not material, that involve management or other Employees or Consultants who have or had a significant role in the internal control over financial reporting of the Company. Since the Reference Date, there have been no material changes in the Company’s internal control over financial reporting.

(d) **No Undisclosed Liabilities.** The Company does not have any Liabilities that are not reflected or reserved against on the face of (and not in the notes to) the Financial Statements, except Liabilities (i) incurred by the Company in connection with the preparation, execution, delivery and performance of the this Agreement and included in the Company Transaction and Bonus Expenses, or (ii) which have arisen in the Ordinary Course of Business since the Interim Balance Sheet Date and which are not, individually or in the aggregate, in excess of $25,000.

(e) **Off-Balance-Sheet Arrangements.** There are no “off-balance-sheet arrangements” (within the meaning of Item 303 of Regulation S-K promulgated by the SEC) with respect to the Company.

(f) **Inventory.** All inventory of the Company as of the Agreement Date, if any, consists of a quality and quantity usable and saleable in the Ordinary Course of Business. All inventory not written off has been priced at the lower of cost or market value on a first in, first out basis. The quantities of each item of inventory as of the Agreement Date are reasonable in the present circumstances of the Company.

(g) **Bank Accounts.** Section 4.5(g) of the Disclosure Schedule sets forth an accurate list and summary description (including account type, name and address) of each bank and other financial institution in which the Company maintains an account (whether checking, savings or otherwise), lock box or safe deposit box and the names of the persons having signing authority or other access thereto. All cash in such accounts is held in demand deposits and is not subject to any restriction as to withdrawal.

(h) **Company Debt.** Except as set forth in Section 4.5(h) of the Disclosure Schedule, there is no Company Debt. With respect to each item of Company Debt, Section 4.5(h) of the Disclosure Schedule accurately sets forth the name and address of the creditor, the Contract under which such debt was issued, the principal amount of the debt and a description of the collateral if secured. The Company is not in default with respect to any outstanding Company Debt or any instrument relating thereto, nor is there any event which, with the passage of time or giving of notice, or both, would result in a default, and no such Company Debt or any instrument or agreement thereto purports to limit the operation of the Company’s business. Complete and correct copies of all instruments (including all amendments, supplements, waivers and consents) relating to any Company Debt have been provided to Buyer.

4.6 **Absence of Certain Changes or Events.** Since the Interim Balance Sheet Date, (i) there has not been a Company Material Adverse Effect and (ii) there has not occurred any damage,
destruction or loss (whether or not covered by insurance) of any material asset of the Company that adversely affects the use thereof. Since the Interim Balance Sheet Date, the Company has been operated in the Ordinary Course of Business. Without limiting the foregoing, since the Interim Balance Sheet Date, the Company has not taken any action described in Section 6.1 that if taken after the Agreement Date and prior to the Closing would violate such provision.

4.7 Legal Proceedings. Since the Reference Date, there have not been and there are no pending Actions, and there are no Actions threatened in writing, in either case, by or against the Company, its properties or assets or any of the Company’s officers or directors in their capacities as such.

4.8 Compliance with Laws; Permits.

(a) The Company is and has at all times been, in material compliance with all Laws applicable to the Company or any of its properties, assets, business or operations, including all Health Care Laws. The Company holds all Permits necessary to conduct its business and own, lease and operate its properties and assets and all such Permits are in full force and effect. The Company is and has always been in material compliance with the terms of all Permits necessary to conduct its business and to own, lease and operate its properties and facilities. Section 4.8(a) of the Disclosure Schedule sets forth a list of all material Permits that are held by the Company. The Company has not received notice from any Governmental Authority claiming or alleging that the Company was not in compliance with all Laws applicable to the Company or its business or operations; the Company has not been assessed a penalty with respect to any alleged failure by the Company to have or comply with any Permit.

(b) Neither the Company, nor any of its officers, directors, Employees, Consultants or agents, have, in the operating of the Company’s business, engaged in any activities which are prohibited or are cause for criminal or civil penalties or mandatory or permissive exclusion from Medicare, Medicaid or any other state or federal health care program under 42 U.S.C. §§ 1320a-7, 1320a-7a, 1320a-7b or 1395nn, 5 U.S.C. § 8901 et seq. (the Federal Employees Health Benefits program statute), or the regulations, agency guidance, or similar legal requirement promulgated pursuant to such statutes or any analogous state or local Laws.

(c) Neither the Company, nor any of its directors, officers or Employees, nor to the Knowledge of the Company, any of its Consultants or agents, has, directly or indirectly given or agreed to give any illegal gift, contribution, payment or similar benefit to any supplier, customer, governmental official or employee or other Person.

(d) (i) Each Current Employee and Current Consultant of the Company required to be licensed by an applicable Governmental Authority, professional body and/or medical body has such licenses, (ii) such licenses are in full force and effect, and (iii) to the Knowledge of the Company, there are no facts or circumstances that could reasonably be expected to result in any such licenses being suspended, revoked or otherwise lapse prematurely.

(e) Neither the Company nor any of its Employees, Consultants, other agents or vendors has been excluded, suspended, debarred or otherwise sanctioned by any Governmental
Authority, including the U.S. Department of Health and Human Services Office of Inspector General or the General Services Administration.

(f) Except as set forth on Section 4.8(f) of the Disclosure Schedule, the Company is and has at all times been in compliance in all respects with all applicable Laws relating to the privacy, security, use and disclosure of health information, including “protected health information” or “PHI” as defined under HIPAA and information related to genetic testing and genetic test results, created, used, disclosed or stored in the course of the operations of the Company, including HIPAA and all applicable state, federal and international laws regarding the privacy and security of health information, including genetic testing and results. The Company has the necessary agreements with all of the Company’s “business associates” as such term is defined by and as such agreements are required by HIPAA. True and complete copies of all HIPAA and health information privacy policies that have been used by the Company since the Reference Date have been provided to Buyer and such privacy policies are in compliance with all applicable Laws relating to the privacy, security, use and disclosure of health information. The Company has at all times materially complied with all rules, policies, and procedures established by the Company from time to time and as applicable with respect to privacy, security, data protection, or the collection and use of health information and genetic testing information created, used, disclosed or stored in the course of the operations of the Company. No actions have been asserted or, to the Knowledge of the Company, threatened against the Company by any person alleging a violation of such person’s privacy, personal, or confidentiality rights under any such rules, policies, or procedures.

(g) Except as set forth on Section 4.8(g) of the Disclosure Schedule, with respect to all health information, PHI, and genetic testing information as described in Section 4.8(f), the Company has taken reasonable steps (including implementing and monitoring compliance with administrative, physical and technical safeguards) to ensure that such information is protected against loss and against unauthorized access, use, modification, disclosure, or other misuse. The Company maintains and has implemented security policies and procedures as required by HIPAA and other applicable laws. Since the Reference Date, there has been no “Breach of Unsecured PHI,” as defined under HIPAA, and no “Security Incident” as defined under HIPAA, resulting in the unauthorized use or disclosure of PHI. The Company maintains systems, policies and procedures to respond to incidents and complaints alleging violations of applicable privacy or security standards and to identify and report all Breaches of Unsecured Protected Health Information in accordance with Company’s legal and contractual obligations.

4.9 Taxes.

(a) The Company has paid all Taxes owed by the Company (without regard to whether or not such Taxes are or were disputed), whether or not shown on any Tax Return. Since the Balance Sheet Date, the Company has incurred no Liability for Taxes arising outside of the Ordinary Course of Business. There are no Liens for Taxes (other than Permitted Liens) on any of the Company’s assets or on any of the Company Units. The Company is not subject to any currently effective waiver of any statute of limitations in respect of Taxes or agreed to any currently effective extension of time with respect to a Tax assessment or deficiency.
(b) The Company has timely filed all Tax Returns that are required to have been filed by the Company. All such Tax Returns are true, correct and complete in all material respects and were filed in compliance with all applicable Laws. The Company is not the beneficiary of any currently effective extension of time within which to file any Tax Return. No written claim has ever been made by any Taxing Authority in a jurisdiction where the Company does not file Tax Returns that it is or may be subject to taxation by that jurisdiction, which claim has not been finally resolved.

(c) The Company has withheld and paid all Taxes required to have been withheld and paid by it in connection with amounts paid or owing by the Company to any Employee, Consultant, creditor, stockholder or other third party. The Company has properly classified all services providers to the Company as employees, independent contractors, or other appropriate status, in accordance and compliance with all applicable Laws, and timely and correctly completed and filed all applicable reports and forms with respect thereto (including all appropriate IRS Form W-2, IRS Forms 1099, as applicable).

(d) No deficiencies for any Taxes have been proposed or assessed, in each case in writing, against or with respect to any Taxes due by, or Tax Returns of, the Company, which deficiencies have not been finally resolved, and there is no outstanding audit, assessment, dispute or claim concerning any Tax Liability of the Company either within the Company’s Knowledge or claimed, pending or raised by an authority in writing, which audit, assessment, dispute or claim has not been finally resolved.

(e) The Company (i) is not nor has never been a member of an affiliated group (other than a group the common parent of which is Company) filing a consolidated federal income Tax Return and (ii) has no Liability for Taxes of any Person arising from the application of Treasury Regulation Section 1.1502-6 or any analogous provision of state, local or foreign Tax Law, or as a transferee or successor, by contract, or otherwise.

(f) The Company has not been a United States real property holding corporation within the meaning of Section 897(c)(2) of the Code during the applicable period specified in Section 897(c)(1)(A)(ii) of the Code.

(g) The Company has disclosed on its federal income Tax Returns all positions taken therein that would reasonably be expected to give rise to a substantial understatement of federal income Tax within the meaning of Section 6662 of the Code.

(h) The Company shall not be required to include an item of income in, or exclude any item of deduction from, taxable income for any taxable period (or portion thereof) ending after the Closing Date as a result of any: (i) change in method of accounting requested by the Company prior to the Closing; (ii) agreement entered into by the Company with any Taxing Authority prior to the Closing; (iii) installment sale or open transaction disposition made by the Company prior to the Closing; (iv) prepaid amounts received or paid by the Company prior to the Closing; (v) the application by the Company of the long-term method of accounting prior to the Closing; (vi) any cancellation of indebtedness income recognized by the Company pursuant to Section 108 of the Code with respect to the Company Debt that is properly allocable to the Pre-Closing Tax Period;
or (vii) deferral of income under Section 108(i) of the Code as a result of any reacquisition of a debt instrument by the Company occurring prior to the Closing.

(i) The Company does not have nor has it ever had a permanent establishment in any foreign country. The Company does not engage nor has it ever engaged in a trade or business in any foreign country that would cause the Company to be obligated to pay Taxes or file Tax Returns in such country.

(j) No Tax Returns of the Company have been audited or are currently the subject of an Action brought by a Taxing Authority. The Company has delivered to Buyer correct and complete copies of all federal and state income Tax Returns and all examination reports and statements of deficiencies filed, or assessed against and agreed to, by the Company with respect to Taxes for all taxable periods ending on or prior to the Agreement Date.

(k) The Company is not, nor has ever been, a “United States shareholder” within the meaning of Section 951(b) with respect to any Person that is or was treated as a “controlled foreign corporation” as defined in Section 957 of the Code. The Company does not own an equity interest in any Person that is treated as a either a “partnership” or as “passive foreign investment company” (each such term as defined pursuant to the Code).

(l) Section 4.9(l) of the Disclosure Schedule lists all jurisdictions (whether foreign or domestic) in which the Company pays Taxes and the nature of the Taxes paid by the Company.

(m) The Company has never been a party to any “listed transaction,” as defined in Section 6707A(c)(2) of the Code and Treasury Regulation Section 1.6011-4(b)(2).

(n) All Taxes (including sales tax, use tax and value-added tax) that were required to be collected or self-assessed by the Company have been duly collected or self-assessed, and all such amounts that were required to be remitted to any Taxing Authority have been duly remitted, and the Company has complied in all material respects with all reporting requirements with respect thereto.

(o) No power of attorney that has been granted by the Company with respect to any matter relating to the Taxes of the Company is currently in force.

(p) The Company has at all times since its formation been properly and validly classified for all U.S. federal, state and local tax purposes as a “partnership” (within the meaning of the Code). No election described in section 1101(g)(4) of P.L. 114-74 (the Bipartisan Budget Act of 2015) has ever been made by or with respect to the Company.
4.10 Employee Benefits and Labor Matters.

(a) Plans and Arrangements. Section 4.10(a) of the Disclosure Schedule sets forth a true and complete list of all Company Plans.

(b) Plan Documents. With respect to each Company Plan, the Company has delivered to Buyer a current, accurate and complete copy thereof (including amendments) or a copy of the representative form agreement thereof and, to the extent applicable, true and complete copies of the following documents with respect to each Company Plan: (i) any Contracts or agreements, plans and related trust documents, insurance Contracts or other funding arrangements, in each case as currently in effect, and all amendments thereto; (ii) the results of the non-discrimination testing since the Reference Date; (iii) Forms 5500 and all schedules thereto since the Reference Date; (iv) the most recent actuarial report, if any; (v) the most recent IRS determination or opinion letter; (vi) all correspondence, rulings or opinions issued by the DOL, IRS or any other Governmental Authority and all material correspondence from the Company to the DOL, IRS or other Governmental Authority other than routine reports, returns or other filings since the Reference Date; (vii) the most recent summary plan descriptions and any summaries of material modifications with respect thereto; and (viii) written descriptions of all non-written Company Plans.

(c) ERISA. No Company Plan is subject to Title IV of ERISA or is otherwise a Defined Benefit Plan as defined in Section 3(35) of ERISA (a “Title IV Plan”) and neither the Company nor any other entity (whether or not incorporated) that, together with the Company, would be treated as a single employer under Section 414(b) or (c) of the Code or, solely for purposes of Section 302 of ERISA and Section 412 of the Code, is treated as a single employer under Section 414(m) or (o) of the Code (each an “ERISA Affiliate”) has incurred any liability pursuant to Title IV of ERISA that remains unsatisfied. Neither the Company nor any ERISA Affiliate has sponsored, contributed or had an obligation to contribute, to any Title IV Plan, or any money purchase pension plan subject to Section 412 of the Code, within the past six (6) years. No Company Plan is or has been a multiemployer plan within the meaning of Section 3(37) of ERISA (a “Multiemployer Plan”) or a multiple employer welfare arrangement within the meaning of Section 3(40) of ERISA. During the past six (6) years, neither the Company nor any of its ERISA Affiliates has completely or partially withdrawn from any Multiemployer Plan and no termination liability to the United States Pension Benefit Guaranty Corporation or withdrawal liability to any Multiemployer Plan has been or is reasonably expected to be incurred with respect to any Multiemployer Plan by the Company nor any of its ERISA Affiliates. Neither the Company nor any other “disqualified person” or “party in interest,” as defined in Section 4975 of the Code and Section 3(14) of ERISA, respectively, has engaged in any “prohibited transaction,” as defined in Section 4975 of the Code or Section 406 of ERISA (which is not otherwise exempt), with respect to any Company Plan, nor, to the Company’s Knowledge, have there been any fiduciary violations under ERISA that could subject the Company (or any Employee) to any penalty or tax under Section 502(i) of ERISA or Section 4975 of the Code.

(d) Status of Plans. Each Company Plan intended to qualify under Section 401 of the Code or other tax-favored treatment under Subchapter B of Chapter 1 of Subtitle A of the Code has received a favorable determination letter from the IRS or is the subject of a favorable
prototype opinion letter from the IRS as to its qualification under the Code and any trusts intended to be exempt from federal income taxation under the Code are so exempt. Except as set forth on Section 4.10(d) of the Disclosure Schedule, no Company Plan intended to qualify under Section 401 of the Code provides for participant plan loans. Nothing has occurred with respect to the operation of any Company Plans that could reasonably be expected to cause the loss of such qualification or exemption, or the imposition of any liability, penalty or Tax under ERISA or the Code. No event has occurred and no condition exists with respect to any Company Plan subject to the requirements of Code Section 401(a) that would subject the Company, either directly or by reason of an ERISA Affiliate of the Company, to any Tax, fine, Lien, penalty or other liability imposed by ERISA, the Code or other applicable Laws. For each Company Plan with respect to which a Form 5500 has been filed, no adverse change has occurred with respect to the matters covered by the most recent Form 5500 since the date thereof. None of the Company Plans provides for post-employment life or health coverage for any participant or any beneficiary of a participant, except as may be required under Part 6 of Subtitle B of Title I of ERISA, Section 4980B of the Code or any similar state law and at the expense of the participant or the participant’s beneficiary.

(e) Contributions to Plans. All contributions required to have been made under any of the Company Plans or by Law (without regard to any waivers granted under Section 412 of the Code) have been timely made. There are no unfunded liabilities or benefits under any Company Plans that are not reflected in the Financial Statements.

(f) Conformity with Laws. All Company Plans have been established, operated and maintained in accordance with their terms and with all applicable provisions of ERISA, the Code and other Laws. All amendments and actions required to bring the Company Plans into conformity in all material respects with all of the applicable provisions of the Code, ERISA and other applicable Laws have been made or taken, except to the extent that such amendments or actions are not required by Law to be made or taken until a date after the Closing. There are no pending Actions arising from or relating to the Company Plans (other than routine benefit claims), nor does the Company have any Knowledge of facts that could form or could reasonably be expected to form the basis for any such Action. There are no filings or applications pending with respect to the Company Plans with the IRS, the DOL or any other Governmental Authority. The Company has satisfied all obligations applicable to the Company or any ERISA Affiliate under Section 4980B of the Code, Part 6 of Subtitle B of Title I of ERISA and each applicable state law relating to continuation of health or other coverage to any Employee of any ERISA Affiliate (or any dependent or former dependent of such Employee) with respect to any qualifying event that has occurred on or before the Closing Date. Section 4.10(f) of the Disclosure Schedule lists each individual who, as of the Agreement Date, (i) is currently receiving continuation coverage under COBRA under a Company Plan, or (ii) is within his or her COBRA election period.

(g) Leased Employees. The Company has no Employees who are “leased employees” (as that term is defined in Section 414(n) of the Code) and has no liability, contingent or otherwise, for any federal, state or local workers’ compensation contribution, with respect to any Employees who are leased employees.

(h) Employment Matters.
(i) Section 4.10(h)(i) of the Disclosure Schedule sets forth a true and complete listing of the Current Employees and the Current Consultants, as of the Agreement Date, including each such person’s name, job title or function and job location, and each such Current Employee’s or such Current Consultant’s current status (as to leave, full time or part time, exempt or nonexempt and temporary or permanent status and as to classification as an employee, consultant, independent contractor, officer or director). Other than as fully reflected or specifically reserved against in the Financial Statements (or as otherwise expressly permitted or required pursuant to this Agreement), neither the Company nor any Seller has paid or promised to pay any bonuses, commissions or incentives to any Employee or Consultant. The Company has delivered to Buyer a true and complete copy of the employee handbook for the Company, if any and all other employment policies, if any, currently applicable to any Employee or Consultant.

(ii) To the Company’s Knowledge, no officer, Current Consultant or Current Employee at the level of manager or higher has disclosed any plans to terminate his, her or their employment or other relationship with the Company.

(iii) The Company has a USCIS Form I-9 that is validly and properly completed in accordance with applicable Law for each Employee and former Employee with respect to whom retention of such form is required by applicable Law. The Company has complied with all Department of Homeland Security, DOL and State Department regulations governing the employment of foreign national workers. The Company has complied with all Laws related to H-1B workers, including the payment of wages and the maintenance of public access files related to the filing of ETA-9035 Labor Condition Applications.

(iv) Except as set forth in Section 4.10(h)(iv) of the Disclosure Schedule:

(A) the Company has paid to each applicable Employee the entire amount of the bonus, if any, earned by such Employee for the year ended December 31, 2019 and no remaining bonus amounts for the year ended December 31, 2019, payable to any Employee, remain unpaid as of the Closing Date;

(B) since the Reference Date: (x) the Company has paid or made provision for payment of all salaries and wages, which are payable by the Company to any Employees, accrued through the Closing Date and is in compliance with all applicable Laws respecting employment and employment practices, terms and conditions of employment, collective bargaining, immigration, wages, hours and benefits, non-discrimination in employment, workers’ compensation, including Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act of 1967, the Equal Employment Opportunity Act of 1972, ERISA, the Equal Pay Act, the National Labor Relations Act, the Fair Labor Standards Act, the Americans with Disabilities Act of 1990, the Vietnam Era Veterans Reemployment Act, the Family and Medical Leave Act, Occupational Safety and Health Act of 1970 and any and all similar applicable state and local Laws; and (y) the Company has not been engaged in any unfair employment practice, as defined in the National Labor Relations Act or other applicable Law;

(C) since the Reference Date, the Company has not received a written notice, citation, complaint or charge asserting any violation or liability under the federal
Occupational Safety and Health Act of 1970 or any similar applicable Law regulating employee health and safety;

(D) (u) none of the Current Employees is represented by any labor union or other labor representative with respect to his or her employment with the Company; (v) there are no labor, collective bargaining agreements or similar arrangements binding on the Company with respect to any Current Employees; (w) since the Reference Date, no petition has been filed nor has any proceeding been instituted by any Employee or group of Employees with the National Labor Relations Board or similar Governmental Authority seeking recognition of a collective bargaining agreement; (x) to the Company’s Knowledge, there are no Persons attempting to represent or organize or purporting to represent for bargaining purposes any of the Current Employees; (y) since the Reference Date, there has not occurred or, to the Company’s Knowledge, has not been threatened any strikes, slowdowns, picketing, work stoppages or concerted refusals to work or other similar labor activities with respect to Employees; and (z) no grievance or arbitration or other proceeding arising out of or under any collective bargaining agreement relating to the Company is pending or, to the Company’s Knowledge, threatened;

(E) since the Reference Date, the Company has not received notice of any charge or complaint pending before the Equal Employment Opportunity Commission or similar Governmental Authority alleging unlawful discrimination in employment practices, or before the National Labor Relations Board or similar Governmental Authority alleging any unfair labor practice, by the Company, nor, to the Knowledge of the Company, has any such charge been threatened;

(F) (x) all Current Employees of the Company are employed on an at-will basis and their employment can be terminated at any time for any reason without any amounts being owed to such individual other than with respect to wages, compensation and benefits accrued before such termination; and (y) except as set forth in Section 4.10(h)(iv)(F) of the Disclosure Schedule, the Company’s relationships with all individuals who act as Consultants to the Company can be terminated at any time for any reason with such notice as is required by their contracts without any amounts being owed to such individual other than with respect to compensation or payments accrued before such termination;

(G) since the Reference Date, the Company has not effectuated: (x) a “plant closing” (as defined in the WARN Act, or any similar Law) affecting any site of employment or one or more facilities or operating units within any site of employment or facility of the Company, to the extent applicable; or (y) a “mass layoff” (as defined in the WARN Act, or any similar Law) affecting any site of employment or facility of the Company, to the extent applicable; and

(H) any individual performing services for the Company who has been classified as an independent contractor, or as an employee of some other entity whose services are leased to the Company, has been correctly classified and is in fact not a common law employee of the Company or any Subsidiary.
(i) **Effect of Transaction.** Except for the payment of the consideration under Article II and except for accelerated vesting and distribution upon the termination of the Genelex Labs 401(k) Profit Sharing Plan, neither the execution and delivery of the this Agreement nor the consummation of the Transactions shall result in (i) any payment becoming due to any Employee, (ii) the provision of any benefits or other rights to any Employee, (iii) the increase, acceleration or provision of any payments, benefits or other rights to any Employee, whether or not any such payment, right or benefit would constitute a “parachute payment” within the meaning of Section 280G of the Code, (iv) require any contributions or payments to fund any obligations under any Company Plan, or (v) the forgiveness in whole or in part of any outstanding loans made by the Company to any Person. No payment, right or benefit that becomes due or accelerated as a result of the execution and delivery of this Agreement or the consummation of the Transactions is an “excess parachute payment” within the meaning of Section 280G of the Code.

(j) **Compliance with Section 409A of the Code.** To the extent that any Company Plan is a Nonqualified Deferred Compensation Plan, such Company Plan is in documentary and operational compliance with, in all respects, Section 409A of the Code and all applicable guidance issued by the IRS thereunder (or could be made compliant without applicable penalties in accordance with such guidance). No payment pursuant to any Company Plan or other arrangement to any “service provider” (as such term is defined in Section 409A of the Code and the United States Treasury Regulations and IRS guidance thereunder) to the Company would subject any person to tax pursuant to Section 409A(1) of the Code, whether pursuant to the Transactions or otherwise. There is no Contract or arrangement to which the Company, or to the Knowledge of the Company, any Company Affiliate is a party or by which it is bound to compensate any of its current or former employees, independent contractors or directors for additional income or excise taxes paid pursuant to Sections 409A or 4999 of the Code.

(k) **Plans Outside the United States.** No Company Plan is subject to the laws of any jurisdiction other than the United States of America.

(l) **Plan Termination.** Each Company Plan can be amended, terminated or otherwise discontinued in accordance with its terms, without Liability to the Company, Buyer or any of their Affiliates (other than ordinary administrative expenses typically incurred in a termination event). Neither the Company nor any of its Affiliates has announced its intention to modify or amend any Company Plan or adopt any arrangement or program which, once established, would come within the meaning of a Company Plan, and each asset held under any Company Plan may be liquidated or terminated without the imposition of any redemption fee, surrender charge or comparable Liability.

4.11 **Environmental Matters.** The Company is, and at all times has been, in material compliance with all applicable Environmental Laws. There is no Action relating to or arising under Environmental Laws that is pending or, to the Knowledge of the Company, threatened against or affecting the Company or any real property or premises currently or formerly owned, operated or leased by the Company. The Company has not received any written notice of, or entered into, or assumed by Contract or operation of Law, any obligation, liability, order, settlement, judgment, injunction or decree relating to or arising under Environmental Laws. To the Knowledge of the
Company, there are no facts, circumstances or conditions existing with respect to the Company or any real property or premises currently or formerly owned, operated or leased by the Company or any property or facility to or at which the Company transported or arranged for the disposal or treatment of Hazardous Materials that could reasonably be expected to result in the Company incurring any Environmental Liability. The Company has not stored, treated, disposed of, arranged for or permitted the disposal of, transported, handled or released any substance (including any Hazardous Materials) or owned, occupied or operated any Premises or property in a manner that has given or could give rise to any material Liabilities (including any Environmental Liabilities for response costs, corrective action costs, personal injury, natural resource damages, property damage, or any investigative, corrective or remedial obligations) pursuant to CERCLA or any other Environmental Laws. To the Knowledge of the Company, no property or facility now or previously owned, occupied or operated by the Company, is currently listed or proposed for listing on the National Priorities List or the Comprehensive Environmental Response, Compensation and Liability Information System, both promulgated under CERCLA, or on any analogous state or local registry list and, to the Knowledge of the Company, no off-site location at which the Company has disposed or arranged for the disposal of any waste is listed or proposed to be listed on the National Priorities List or on any analogous state or local list. The Company has delivered to Buyer a true and complete list of environmental reports, audits assessments and investigations in the Company’s possession or control which relate to the Premises and the real property in the Company’s possession or control. There have been no Releases at any real property and there are no above-ground, nor to the Company’s Knowledge, underground, storage tanks, oil/water separators, sumps, septic systems, or polychlorinated biphenyls (PCBs) or any PCB-containing equipment located on any real property.

4.12 Contracts.

(a) Specified Material Contracts. Except as set forth in Section 4.12(a) of the Disclosure Schedule, the Company is not a party to, does not have any obligations, rights or benefits under and none of its assets or properties are bound by any:

(i) Contracts that purport to limit, curtail or restrict the ability of the Company or its Affiliates to conduct business in any geographic area or line of business or restrict the Persons with whom the Company or any of its future Subsidiaries or Affiliates may do business;

(ii) Contracts: (x) with any Employee and any offer letters for employment or consulting with the Company, that (A) provide for anticipated annual compensation or other payments in excess of $75,000 for any individual (other than employment offers terminable at will with no severance or acceleration liability), including any Contracts with individuals providing for any commission-based compensation in excess of such amount, (B) provide for the payment of non-qualified deferred compensation subject to Section 409A of the Code, or (C) provide for potential severance payments or other severance benefits; and (y) with any Consultant and any offer letters to enter into consulting agreements with the Company, that provide for anticipated annual payments in excess of $75,000 for any individual, including any Contracts with individuals providing for any commission-based payments in excess of such amount;

(iii) Contracts with any labor union or other labor representative of Employees (including any collective bargaining agreement);
(iv) Contracts with any present or former officer, member or manager of the Company, or any Affiliate of such officer, member or manager (other than Company Plans, but specifically including any employment agreements that are not terminable at will without severance or acceleration liability), including, but not limited to, any agreement providing for the employment of, furnishing of services by, rental of assets from or to, or otherwise requiring payments to, any such officer, member, manager or Affiliate, in each case, other than advances or reimbursements for business expenses consistent with the Company’s policy and past practice;

(v) Contracts under which the Company has advanced or loaned any money to any of the Employees or Affiliates of the Company where there is still an outstanding amount due to the Company under such Contract, other than advances or reimbursements for business expenses consistent with the Company’s policy and past practice;

(vi) Contracts granting any power of attorney with respect to the affairs of the Company or otherwise conferring agency or other power or authority to bind the Company other than to officers and attorneys in the Ordinary Course of Business;

(vii) Partnership or joint venture agreements;

(viii) Contracts for the acquisition, sale or lease of all or a material portion of the properties or assets of any Person (including any ownership interest in any entity) other than in the Ordinary Course of Business;

(ix) Contracts with a Governmental Authority;

(x) Loan or credit agreements, indentures, notes or other Contracts evidencing indebtedness for borrowed money (contingent or otherwise) by the Company, or any Contracts pursuant to which indebtedness for borrowed money (contingent or otherwise) is guaranteed by the Company, or any guarantees of the foregoing by third parties for the Company’s benefit;

(xi) Mortgages, pledges, security agreements, deeds of trust or other Contracts granting a Lien other than Permitted Lien on any material property or assets of the Company;

(xii) Voting agreements or registration rights agreements relating to Company Units to which the Company is a party;

(xiii) Lease or rental Contracts relating to personal property;

(xiv) Contracts providing for indemnification by the Company other than (x) customary indemnities against breach of the obligations contained in such Contract that were entered into in the Ordinary Course of Business and (y) customary indemnities against infringement of Intellectual Property Rights contained in non-exclusive licenses entered into in the Ordinary Course of Business;
(xv) Any Contract with any supplier or provider of goods or services that are incorporated into, or related to the development of, any Product and Service involving consideration in excess of $50,000 in the current or either of the two (2) previous fiscal years (other than purchase orders for goods entered into in the Ordinary Course of Business);

(xvi) Any Contracts to (x) provide services to any Person involving consideration in excess of $50,000 in the current or either of the two (2) previous fiscal years, or (y) perform any service or sell or lease any product which grants the other party or any third party “most favored nation” status, “most favored customer” pricing, preferred pricing, exclusive sales, distribution, marketing or other exclusive rights, or rights of first refusal or rights of first negotiation;

(xvii) Contracts related to the manufacturing, transport, transfer, distribution or storage of any Product and Service involving consideration in excess of $50,000 in the current or either of the two (2) previous fiscal years;

(xviii) Contracts relating to capital expenditures and involving obligations after the Agreement Date in excess of $50,000 and not cancelable without penalty;

(xix) Contracts relating to the disposition or acquisition of material assets or any ownership interest in any entity;

(xx) Contracts with any Person, including any financial advisor, broker, finder, investment banker or other Person, providing advisory services to the Company in connection with the Transactions; and

(xxi) Contracts to enter into or negotiate the entering into of any of the foregoing.

(b) **Documentation.** The Company has delivered to Buyer (i) true and complete copies of each written Material Contract (subject to redaction of any commercially sensitive pricing information with respect to Contracts with the Company’s customers or payors) and (ii) a summary of each oral Material Contract, together with any and all amendments, supplements and “side letters” thereto.

(c) **Status of Material Contracts.** Each of the Contracts required to be listed in Section 4.12(a) of the Disclosure Schedule, each of the Real Property Leases and each of the IP Contracts (collectively, the “Material Contracts”) is valid and binding on the Company and in full force and effect and is enforceable in accordance with its terms by the Company. The Company is not in material breach or default under any Material Contract, nor does any condition exist that, with notice or lapse of time or both, would constitute a breach or default in any respect thereunder by the Company or that would, to the Knowledge of the Company, result in a material liability to the Company. To the Knowledge of the Company, (i) no other party to any Material Contract is in default thereunder and (ii) no condition exists that with notice or lapse of time or both would constitute a default in any respect by any such other party thereunder. The Company has not received notice of any termination or cancellation of any Material Contract, and to the Company’s Knowledge, no other party to a Material Contract has plans to terminate or cancel such Material Contract. The
Company has not and, to the Knowledge of the Company, no other party to any Material Contract has repudiated any provision of any Material Contract. The Company is not disputing and, to the Knowledge of the Company, no other party to such Material Contract is disputing, any provision of any Material Contract. None of the parties to any Material Contract is renegotiating any amounts paid or payable to or by the Company under such Material Contract or any other term or provision thereof.

4.13 **Assets: Title, Sufficiency, Condition.** The Company has good, valid and sufficient title to or sole and exclusive leasehold interest in or adequate right to use all of its assets whether real or personal, tangible or intangible, including those that are used in the conduct of the business of the Company, located on the Company’s Premises or reflected in the Interim Balance Sheet as being owned by the Company or acquired after the date thereof (other than inventory disposed of in the Ordinary Course of Business since the date of the Interim Balance Sheet) (the “Assets”), free and clear of all Liens except Permitted Liens. The Assets constitute, in all material respects, all of the assets, properties and rights of every type and description that are used in and necessary for the conduct of the Company’s business as currently conducted. All of the material fixtures and other material improvements to the Leased Real Property and all of the tangible personal property of the Company (i) are in all material respects adequate and suitable for their present uses, (ii) in good working order, operating condition and state of repair (ordinary wear and tear excepted) and (iii) have been maintained in all respects in accordance with normal industry practice.

4.14 **Real Property.**

(a) Section 4.14(a) of the Disclosure Schedule (i) sets forth a list of the addresses of all real property leased, subleased or licensed by or for which a right to use or occupy has been granted to the Company (the “Leased Real Property”), and (ii) identifies, with respect to each Leased Real Property, each lease, sublease, license or other Contract under which such Leased Real Property is occupied or used, including the date of and legal name of each of the parties to such lease, sublease, license or other Contract and each amendment, modification, supplement or restatement thereto (the “Real Property Leases”).

(b) The Company does not own, and has never owned, any real property.

(c) There are no written or oral leases, subleases, licenses, concessions, occupancy agreements or other Contracts granting to any other Person the right to use or occupancy of any of the Leased Real Property and there is no Person (other than the Company) in possession of any of the Leased Real Property. With respect to each Real Property Lease that is a sublease, to the Company’s Knowledge, the representations and warranties in this Section 4.14(c) and Section 4.12(c) are true and correct with respect to the underlying lease.

(d) The Company has delivered to Buyer true, accurate and complete copies of the Real Property Leases, in each case as amended or otherwise modified and in effect, together with any extension notices and other material correspondence, lease summaries, notices or memoranda of lease, estoppel certificates and subordination, non-disturbance and attornment agreements related thereto and no Real Property Lease has been modified in any material respect, except to the extent that such modifications are disclosed by the copies delivered to Buyer prior to
Closing. With respect to each of the Real Property Leases, (i) the Company has a valid and enforceable leasehold interest in each parcel or tract of real property leased by it, free and clear of all Liens (including liens arising out of any attachment, judgement or execution) affecting the Leased Real Property or the estate or interest created by the Real Property Leases except for the Permitted Liens; (ii) there are no existing defaults thereunder by the Company or, to the Knowledge of the Company, any other party to the Real Property Leases; (iii) no event has occurred which (with notice, lapse of time or both) would constitute a breach or default thereunder by the Company or, to the Knowledge of the Company, any other party to the Real Property Leases, or that could permit the termination, modification, or acceleration of rent thereunder; (iv) there are no pending disputes, actions or proceedings that were brought by the Company against a lessor under a Real Property Lease alleging that such lessor is in default or has committed a breach under such Real Property Lease; (v) the Company has not received any written notice from any Governmental Authority of a violation of any governmental requirements (including Environmental Laws) with respect to any of the Leased Real Property and to the Company’s Knowledge, the Leased Real Property is not in violation of any material requirements of same; and (vi) the Company has not used, generated, stored, released, discharged, transported, handled, or disposed of any hazardous materials on, in or in connection with any parcel of Leased Real Property except as expressly permitted pursuant to the terms of the Real Property Leases.

(e) No eminent domain, condemnation or zoning, building code or other moratorium Action is pending or, to the Company’s Knowledge, threatened, that would preclude or materially impair the use of any Leased Real Property. None of the Company’s current uses of the Leased Real Property materially violates any restrictive covenant or zoning ordinance that affects any of the Leased Real Property. There have been no special assessments filed, or, to the Company’s Knowledge, proposed against the Leased Real Property or any portion thereof. None of the Leased Real Property has been damaged or destroyed by fire or other casualty.

(f) All Premises are supplied with utilities and other services necessary for the operation of such Premises as the same are currently operated.

4.15 Intellectual Property; Technology; Privacy and Security; Information Systems; Disaster Recovery.


(i) The Company owns or has the right to use all Company Technology and all Intellectual Property Rights therein for all purposes necessary or useful to the Company’s business as presently conducted. Except for (x) the Technology and Intellectual Property Rights licensed to the Company under the Inbound IP Contracts and (y) off the shelf, “click wrap” or “shrink wrap” license agreements for software that is generally commercially available to the public on reasonable terms (“Shrink Wrap Licenses”), in each case with annual, aggregate payments (including license, maintenance and support fees) not in excess of $20,000 individually or $50,000 in the aggregate, none of the Company Technology or Company Intellectual Property Rights is owned by any third party. The Company exclusively owns all Company Technology, including Proprietary Software and all Company Intellectual Property Rights that are owned or purported to be owned by the Company free and clear of all Liens other than with respect to the Permitted Liens.
Section 4.15(a)(ii) of the Disclosure Schedule contains a list and description of Proprietary Software. Except as disclosed by Section 4.15(a)(ii) of the Disclosure Schedule: (r) Proprietary Software is not subject to any transfer, assignment, change of control, site, equipment, or other operational limitations; (s) the Company has maintained and protected all Proprietary Software (including all source code and system specifications) with appropriate proprietary notices (including the notice of copyright in accordance with the requirements of 17 U.S.C. § 401), confidentiality and non-disclosure agreements and such other measures as are reasonably necessary to protect the Intellectual Property Rights contained therein or relating thereto, and none of the source code of any Proprietary Software has been published, disclosed or delivered to any Person by the Company (other than those subcontractors listed on Section 4.15(a)(ii) of the Disclosure Schedule) or by any employee, consultant, contractor or agent of the Company; (t) no licenses or rights (including contingent rights) have been granted by the Company, or any of its Affiliates, to any Person to access, use or distribute any source code of any Proprietary Software; (u) the Company has copies of all releases or separate versions of all Proprietary Software so that the same may be subject to registration in the United States Copyright Office; (v) the Company has complete and exclusive right, title and interest in and to all Proprietary Software; (w) the Company has developed the Proprietary Software through its own efforts and for its own account without the aid or use of any consultants, agents, independent contractors or Persons (other than Persons that are Employees); (x) the Proprietary Software includes the current source code, system documentation, statements of principles of operation and schematics, as well as any pertinent commentary, explanation, program (including compilers), workbenches, tools and higher level (or “proprietary”) language actually created, owned or used by the Company for the development, maintenance and implementation thereof, so that a trained computer programmer could develop, maintain, support, compile and deploy all releases or separate versions of the same; (y) the Source Code Materials for the Proprietary Software are complete and accurate; and (z) there are no Contracts in effect with respect to the marketing, distribution or licensing of the Proprietary Software by any other Person.

(b) Infringement. Neither (i) the operation of the business of the Company, including as presently conducted, nor (ii) any of the Products and Services or Company Technology has infringed upon, diluted, misappropriated or violated or will infringe upon, dilute, misappropriate or violate, any Intellectual Property Rights of any Person. The Company has not received any written charge, complaint, claim, demand or notice alleging infringement, dilution, misappropriation or violation of the Intellectual Property Rights of any Person (including any demand to refrain from using or to license any Intellectual Property Rights of any Person in connection with the conduct of the Company’s business). To the Company’s Knowledge, no Person has infringed upon, diluted, misappropriated or violated any Company Intellectual Property Rights owned by the Company at any time since the Reference Date. There are no pending or, to the Company’s Knowledge, threatened claims against the Company or any facts or circumstances supporting a claim challenging the Company’s ownership of the Company Intellectual Property Rights or alleging that any of the Company Intellectual Property Rights are invalid or unenforceable.

(c) Scheduled IP. Section 4.15(c) of the Disclosure Schedule identifies all patents, patent applications, registered trademarks and copyrights, applications for trademark and copyright registrations, domain names, registered design rights and other forms of registered
Intellectual Property Rights and applications therefor owned by or exclusively licensed to the Company (collectively, the “Company Registrations”). All Company Registrations have been duly maintained (including the payment of fees) and are not expired, cancelled or abandoned. Section 4.15(c) of the Disclosure Schedule also identifies each trade name, each unregistered trademark, service mark, or trade dress and each unregistered copyright owned or exclusively licensed by the Company that, in each case, is material to the business of the Company.

(d) **IP Contracts.** Section 4.15(d) of the Disclosure Schedule identifies under separate headings each Contract under which the Company uses or licenses from third parties Company Technology or Company Intellectual Property Rights that are material to the operation of the business of the Company as presently conducted and that any Person besides the Company owns, including Software other than Proprietary Software that is licensed to or used by the Company or any of its Affiliates and is related to Company’s business (“Third Party Software”) (other than Shrink Wrap Licenses and Public Software) (collectively “Inbound IP Contracts”) or under which the Company has granted any Person any right or interest in Company Intellectual Property Rights including any right to use or access any item of the Company Technology (the “Outbound IP Contracts”, and together with the Inbound IP Contracts, the “IP Contracts”). None of the Inbound IP Contracts are subject to any transfer, assignment or change of control limitations. Except as provided in the Inbound IP Contracts and Shrink Wrap Licenses, the Company does not owe any royalties or other payments or otherwise have any liability to any Person for the use of any Intellectual Property Rights or Technology. The Company has paid all fees, royalties and other payments applicable to the past and current use or exploitation of Intellectual Property Rights provided for by the Inbound IP Contracts and Shrink Wrap Licenses, and no fees, royalties or other payments provided by the Inbound IP Contracts and Shrink Wrap Licenses are due or otherwise required to be paid by the Company or any of its Affiliates within thirty (30) days following the Closing Date or otherwise will become due as a result of, or attributable to, the Transactions contemplated herein.

(e) **Confidentiality and Invention Assignments.** The Company has maintained practices designed to ensure the protection of the confidentiality of the Company’s confidential information and trade secrets and, except as disclosed on Section 4.15(e) of the Disclosure Schedule, has required any Employee, Consultant or third party with access, or to whom it has disclosed its confidential information, to execute contracts requiring them to maintain the confidentiality of such information and use such information only in accordance with such contracts. Except as disclosed on Section 4.15(e) of the Disclosure Schedule, all Employees and Consultants of the Company who (i) in the normal course of their duties are involved in the creation of Company Technology that is incorporated in any Product and Service of the Company or (ii) have in fact created any Company Technology that is incorporated in any Product and Service of the Company, have executed contracts that irrevocably assign to the Company on a worldwide royalty-free basis all of such Persons’ respective rights, including Intellectual Property Rights relating to such Company Technology. To the Knowledge of the Company, no Employee or Consultant is in violation of any term of any such agreement, including any patent disclosure agreement or other employment contract or any other contract or agreement relating to the relationship of any such Employee or Consultant with the Company. Except as disclosed on Section 4.15(e) of the Disclosure Schedule, all authors of any works of authorship in the Company Technology owned by the Company have waived their moral rights and have agreed to a covenant not to assert their moral rights.
(f) **Open Source Software.** Except as disclosed on Section 4.15(f) of the Disclosure Schedule, none of the Company Technology that is owned by the Company, Proprietary Software or any Product or Service of the Company (including any software, middleware, firmware) constitutes or contains any Public Software. The Proprietary Software has never been provided, delivered or distributed to any Person other than those Employees and Consultants of the Company working on the development of Company’s software, firmware or middleware for the benefit of the Company and has never been delivered or distributed in any form (object code, executable code or source code form) to any Person, including delivery via electronic transmission, by physical delivery on tangible media (either as stand-alone software or as a part of any other software), loan, delivery or transmission as part of the transfer of hardware or components, or any other form of delivery or distribution, temporary or permanent. None of the Company Technology that is owned by the Company, Proprietary Software, nor any Product or Service of the Company is subject to any IP Contract or other contractual obligation that would require the Company to publicly divulge any source code or trade secret that is part of the Company Technology that is owned by the Company, Proprietary Software, or any Product or Service of the Company.

(g) **Privacy and Data Security.**

(i) The Collection and Use and dissemination by the Company of any Personal Data is in compliance in all respects with the Company’s privacy policies and terms of use, industry standards, all applicable Information Privacy and Security Laws, all Personal Data Obligations, and all Contracts to which the Company is bound. No Personal Data is stored or otherwise maintained outside the United States by the Company or any third party. The Company has not engaged in cross-border processing of Personal Data. True and complete copies of all privacy policies that have been used by the Company since the Reference Date have been provided to Buyer. The Company has consistently posted a privacy policy in a clear and conspicuous location on all websites and any mobile applications owned or operated by the Company.

(ii) The Company does not Collect or Use Personal Data from any Person in any manner other than as described in the Contracts and privacy policies delivered to Buyer.

(iii) The Company maintains policies and procedures regarding data security and privacy and maintains administrative, technical and physical safeguards that are commercially reasonable and, in any event, in compliance with industry standards, all applicable Information and Privacy and Security Laws and all Contracts to which the Company is bound. True and complete copies of all such policies and procedures have been provided to Buyer. The Company has complied at all times in all respects with the terms of all Contracts to which the Company is a party relating to data privacy, security or breach notification (including provisions that impose conditions or restrictions on the collection, use, disclosure, transmission, destruction, maintenance, storage, or safeguarding of Personal Data).

(iv) At any time since the Reference Date, there have been no security breaches relating to, or violations of any security policy or Information Privacy and Security Law regarding, or any unauthorized access, disclosure, or use of, any data or information used by the Company, including Personal Data. No notice has been provided to the Company by a third party vendor or any other person of any security breach relating to Personal Data. The Company has not
experienced a loss or unauthorized disclosure, use, or breach of privacy or security of any Personal Data in the custody or control of the Company that would have required notice to any third Person (including any Governmental Entity or parties to any Contract) under any applicable Law. No Person (including any Governmental Authority) has commenced any Action relating to the Company’s information privacy or data security practices, or to the Knowledge of the Company, threatened any such Action or made any complaint, investigation, or inquiry relating to such practices.

(y) The Company does not (x) have or solicit any customers in the European Economic Area, or (y) except as set forth in Section 4.15(g)(v) of the Disclosure Schedule, process, transmit, or store any Personal Data of any Persons located in the European Economic Area.

(vi) The Company has taken all required steps to limit access to Personal Data to: (x) those Company personnel and third-party vendors providing services to or on behalf of the Company who have a need to know such Personal Data in the execution of their duties to the Company; and (y) such other Persons permitted to access such Personal Data in accordance with the privacy policies and terms of use, industry standards, all applicable Information Privacy and Security Laws and all Contracts to which the Company is bound.

(vii) The Company maintains a written technical information security program that contains administrative, technical and physical safeguards (including encryption) compliant in all respects with industry standards and applicable Information Privacy and Security Laws (the “Security Program”). The Security Program is designed to: (v) protect the integrity and confidentiality of Personal Data; (w) protect against reasonably anticipated threats or hazards to the security of Personal Data; (x) protect against the unauthorized access, disclosure or use of Personal Data; (y) address computer and network security; and (z) provide for the secure destruction and disposal of Personal Data. The Security Program has been updated as required by all applicable Information Privacy and Security Laws. All third-party vendors or persons with access to Personal Data have entered into contracts or written agreements with the Company requiring that such vendors or persons maintain a substantially similar security program.

(viii) The Company controls the access to its computer and information technology networks through the utilization of industry-standard or better security measures that are designed to prevent unauthorized access to such networks. All of the Company’s security measures are designed to be consistent with or exceed industry standards and the requirements of applicable Laws and are designed to (x) prevent the unauthorized disclosure of confidential information (including Personal Data) of the Company, (y) prevent access without express authorization (and immediately terminate such unauthorized access) to the networks and information system of the Company and (z) facilitate the Company’s identification of the person making or attempting to make such unauthorized access.

(h) Effect of Transactions on Company Technology Rights or Data Privacy. The Transactions shall not adversely affect the Company’s ownership of any Company Technology or the Company’s legal right and ability to continue using the Company Technology in the operation of the Company’s business on or after the Closing to the same extent as the Company Technology
is used in the operation of the business prior to the Closing. The Transactions (including any transfer of Personal Data resulting from the Transactions) (i) comply with all Personal Data Obligations of the Company, and (ii) comply (and the disclosure to, transfer to, and use by the Buyer of such Personal Data after the Closing will comply) with all Information Privacy and Security Laws (including any such Laws and regulations in the jurisdictions where the Personal Data is collected). Following the Closing, the Company shall continue to have the right to use such Personal Data on identical terms and conditions as the Company enjoyed immediately prior to the Closing.

(i) **Information Systems.** The Company owns, leases or licenses all Information Systems that are used in, or necessary for, the business of the Company, including the capacity and ability to process current peak volumes in a timely manner. The Information Systems are in good working condition, comply with all service level requirements of related Contracts, and are adequate and have sufficient capacity for the conduct of the Company’s business as currently conducted. In the last twelve (12) months, there have been no material failures, breakdowns, outages or unavailability of such Information Systems and the DR Plans were not activated other than for testing purposes. On and after the Closing, the Information Systems shall be in the possession, custody or control of the Company, along with all tools, documentation and other materials relating thereto, as existing immediately prior to the Closing.

(j) **Disaster Recovery.** The Company has delivered to Buyer a true and complete copy of the DR Plans. To the Knowledge of the Company, the DR Plans are consistent with or exceed industry standards and applicable Laws. The DR Plans are designed to ensure, at a minimum, the ability of the Company to resume operations and performance of services promptly and ensure redundancy of all data and information material to the operation of the Company that the Company is required to maintain pursuant to any Contract, internal policy or applicable Law.

4.16 **Insurance.** Section 4.16 of the Disclosure Schedule sets forth a list of all policies of property, general liability, directors and officers, fiduciary, employment, title, workers’ compensation, environmental, product liability, cyber liability and other forms of insurance maintained by the Company and all pending outstanding claims against such insurance policies. The Company has delivered to Buyer complete and correct copies of all such policies, together with all endorsements, riders and amendments thereto. There are no disputes with the insurers of any such policies or any claims pending under such policies as to which coverage has been reserved, questioned, denied or disputed by the insurers of such policies. Each such policy is in full force and effect, all premiums that are due and payable under all such policies have been paid, the Company is otherwise in material compliance with the terms of such policies, and the Transactions shall not result in any termination of, or otherwise adversely affect, any such policy. The Company has not failed to give proper notice of any known claim under any such policy in a valid and timely fashion. The Company has not received any notice of non-renewal, cancellation or termination of any insurance policy in effect on the Agreement Date.

4.17 **Related Party/Affiliate Transactions.** There are no Liabilities of the Company to any Related Party other than ordinary course, Employee- and director-related compensation and reimbursement Liabilities. No Related Party has any interest in any property (real, personal or mixed, tangible or intangible) used by the Company in the conduct of its business. Except as set
forth in Section 4.17 of the Disclosure Schedule, the Company is not subject to any ongoing transactions pursuant to which the Company purchases any services, products or Technology from, or sells or furnishes any services, products or Technology to, any Related Party. Except as set forth in Section 4.17 of the Disclosure Schedule, all transactions pursuant to which any Related Party has purchased any services, products or Technology from, or sold or furnished any services, products or technology to, the Company (each a “Related Party Transaction”) have been on an arm’s-length basis on terms no less favorable to the Company than would be available from an unaffiliated party.

4.18 Suppliers. Section 4.18 of the Disclosure Schedule sets forth true and complete lists of the top ten suppliers of the Company (measured in terms of total expenses) attributable to each such Person during the year ended December 31, 2019 (each Person identified on at least one of such lists, a “Top Supplier”), showing the total purchases by the Company from each such Top Supplier during such period. Since the Interim Balance Sheet Date, no Top Supplier has (i) ceased or materially reduced its sales or provision of services to the Company or changed the pricing or other terms of the business it does with the Company, other than in the Ordinary Course of Business, or (ii) to the Knowledge of the Company, threatened to cease or materially reduce such sales or provision of services, other than in the Ordinary Course of Business. No Top Supplier has pending or threatened in any Action against the Company.

4.19 Certain Business Practices. Neither the Company nor any Employee or, to the Company’s Knowledge, any agent, acting on behalf of the Company, has (i) used any funds for unlawful contributions, gifts, entertainment or other unlawful payments relating to political activity, (ii) made any unlawful payment to any foreign or domestic government official or employee or to any foreign or domestic political party or campaign or violated any provision of the Foreign Corrupt Practices Act of 1977, as amended, (iii) consummated any transaction, made any payment, entered into any Contract or arrangement or taken any other action in violation of the Anti-Kickback Statute, as amended, or (iv) made any other unlawful payment of a type similar to those described above in this Section 4.19.

4.20 Brokers and Other Advisors. No broker, investment banker, financial advisor or other Person is entitled to any broker’s, finder’s, financial advisor’s or other similar fee or commission, or the reimbursement of expenses, in connection with the Transactions or any prior actual or potential merger, acquisition or divestiture transaction based upon arrangements made by or on behalf of the Company or any of its Affiliates. Notwithstanding anything in this Agreement to the contrary, there are no fees or expenses related to the Transactions payable by the Company to any third party other than the Company Transaction and Bonus Expenses.

ARTICLE V

REPRESENTATIONS AND WARRANTIES OF BUYER

Buyer represents and warrants to the Sellers as of the Agreement Date and as of the Closing Date as follows:

5.1 Organization. Buyer is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware.
5.2 Authority; Non-Contravention.

(a) Buyer has all requisite corporate power and corporate authority to execute and deliver this Agreement and to perform its obligations thereunder and to consummate the Transactions. The execution, delivery and performance by Buyer of this Agreement and the consummation by Buyer of the Transactions have been duly authorized and approved by Buyer’s board of directors and no other corporate action on the part of Buyer is necessary to authorize the execution, delivery and performance by Buyer of this Agreement and the consummation by it of the Transactions. This Agreement has been and, when delivered at the Closing shall be, duly executed and delivered by Buyer. Assuming due authorization, execution and delivery hereof and thereof by the other parties hereto and thereto, this Agreement constitutes the legal, valid and binding obligations of Buyer, enforceable against Buyer in accordance with their respective terms, except to the extent that their enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium, or similar laws affecting the enforcement of creditors’ rights generally and by general equitable principles.

(b) Neither the execution and delivery of this Agreement, nor the consummation by Buyer of the Transactions, nor compliance by Buyer with any of the terms or provisions thereof, shall (i) violate any provision of the Charter Documents of Buyer or (ii) assuming that the consents and approvals referred to in Section 5.3 are obtained and the filings referred to in Section 5.3 are made, (x) violate any Law applicable to Buyer or any of Buyer’s properties or assets, or (y) constitute a default under (with or without notice or lapse of time, or both), result in the termination of or cancellation under, or result in the creation of any Lien upon any of the properties or assets of Buyer under, any of the terms, conditions or provisions of any material Contract to which Buyer is a party, except for such violations, losses, defaults, terminations, cancellations, accelerations or Liens as, individually or in the aggregate, would not reasonably be expected to have a Buyer Material Adverse Effect.

5.3 Governmental Approvals. No consent, approval or authorization of, or registration, qualification or filing with, any Governmental Authority is required for the valid execution, delivery and performance of this Agreement by Buyer or the consummation by Buyer of the transactions contemplated hereby, except for (i) a filing with the New York Stock Exchange in respect of the shares of Buyer’s Common Stock issuable pursuant to this Agreement and (ii) such consents, approvals, orders, authorizations, registrations, declarations and filings as may be required under applicable federal or state securities laws.

5.4 SEC Documents.

(a) Buyer has filed all reports required to be filed by it with the SEC since January 1, 2018, and Buyer has made available to the Sellers (including through the SEC’s EDGAR database) true, correct and complete copies of all such reports (collectively, “Buyer’s SEC Documents”). As of their respective dates, each of the Buyer’s SEC Documents complied in all material respects with the applicable requirements of the Securities Exchange Act of 1934, as amended (the “1934 Act”), and none of the Buyer’s SEC Documents, as of their respective dates, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in
order to make the statements made therein, in light of the circumstances under which they were made, not misleading.

(b) Each of the consolidated financial statements (including, in each case, any notes thereto) contained in the Buyer’s SEC Documents was prepared in accordance with GAAP throughout the periods indicated (except as may be indicated in the notes thereto and except that financial statements included with interim reports do not contain all notes to such financial statements) and each fairly presented in all material respects the consolidated financial position, results of operations and changes in stockholders’ equity and cash flows of Buyer and its consolidated subsidiaries as at the respective dates thereof and for the respective periods indicated therein (subject, in the case of unaudited statements, to normal year-end adjustments which are not expected, individually or in the aggregate, to be material).

5.5 Shares of Common Stock. The shares of Buyer Common Stock to be issued and delivered to the Sellers in accordance with this Agreement, when so issued and delivered, will be (i) duly authorized, validly issued, fully paid and nonassessable and not subject to preemptive rights created by statute, the Charter Documents of Buyer or any agreement to which Buyer is a party, and (ii) based in part upon the statements of the Sellers in Article III, issued pursuant to available and valid exemptions from the registration and qualification provisions of applicable federal and state securities laws.

5.6 No Broker and No Transaction Expenses. No finder, broker, agent or other similar intermediary has acted for or on behalf of Buyer in connection with the negotiation of this Agreement or the consummation of the transactions contemplated hereby.

ARTICLE VI

CERTAIN AGREEMENTS OF THE PARTIES

6.1 Conduct of the Business. Except as expressly permitted by this Agreement, or with the prior written consent of Buyer (not to be unreasonably withheld, conditioned or delayed) or as required by applicable Law, from the Agreement Date until the Closing or the earlier termination of this Agreement pursuant to Article VIII (Termination), the Sellers shall cause the Company to (i) conduct its business in the Ordinary Course of Business and in compliance with all applicable Laws, (ii) use commercially reasonable efforts to maintain and preserve intact its present business organization and the goodwill of those having business relationships with it (including by using commercially reasonable efforts to maintain the value of its assets and technology and preserve its relationships with Employees, suppliers, strategic partners, licensors, licensees, regulators, landlords and others having business relationships with the Company) and retain the services of its present officers, directors and Employees and (iii) use commercially reasonable efforts to maintain in full force and effect all insurance policies described in Section 4.16. Without limiting the generality of the foregoing, until the Closing or the earlier termination of this Agreement pursuant to Article VIII (Termination), the Sellers shall cause the Company not to:

(a) issue, sell, grant, dispose of, amend any term of, grant registration rights with respect to, pledge or otherwise encumber any Company Units or other equity interests, or any
securities or rights convertible into, exchangeable or exercisable for, or evidencing the right to subscribe for any Company Units or other equity interests, or any rights, warrants, options, calls, commitments or any other agreements of any character to purchase or acquire any Company Units or other equity interests or any securities or rights convertible into, exchangeable or exercisable for, or evidencing the right to subscribe for, any Company Units or other equity interests; provided, however, that the Company may issue Company Units upon the conversion of the Company Notes and in accordance with the terms thereof;

(b) amend (including by reducing an exercise price or extending a term) or waive any of its rights under, or accelerate the vesting under, any provision of any agreement evidencing any outstanding warrant or other right to acquire Company Units or any similar or related contract;

(c) redeem, purchase or otherwise acquire or cancel any of its outstanding Company Units or other equity interests, or any rights, warrants, options, calls, commitments or any other agreements of any character to acquire any Company Units or other equity interests;

(d) declare, set aside funds for the payment of or pay any dividend on, or make any other distribution (whether in cash, equity or property) in respect of, any Company Units or other equity interests or make any payments to the Sellers in their capacity as members of the Company;

(e) split, combine, subdivide, reclassify or take any similar action with respect to any Company Units;

(f) form any Subsidiary;

(g) incur, guarantee, issue, sell, repurchase, prepay or assume any (i) Company Debt, or issue or sell any options, warrants, calls or other rights to acquire any debt securities of the Company; (ii) obligations of the Company issued or assumed as the deferred purchase price of property; (iii) conditional sale obligations of the Company; (iv) obligations of the Company under any title retention agreement (but excluding trade accounts payable and other accrued current liabilities arising in the Ordinary Course of Business); (v) obligations of the Company for the reimbursement of any obligor on any letter of credit; or (vi) obligations of the type referred to in clauses (i) through (vi) of other Persons for the payment of which the Company is responsible or liable, directly or indirectly, as obligor, guarantor, surety or otherwise, including guarantees of such obligations;

(h) sell, transfer, lease, license, mortgage, encumber or otherwise dispose of (including pursuant to a sale-leaseback transaction or an asset securitization transaction) any of its properties or assets, other than in the Ordinary Course of Business;

(i) subject to any Lien other than a Permitted Lien (including pursuant to a sale-leaseback transaction or an asset securitization transaction), any of its properties or assets;

(j) make any capital expenditures in excess of $50,000 in the aggregate;
(k) acquire or agree to acquire in any manner (whether by merger or consolidation, the purchase of an equity interest in or a material portion of the assets of or otherwise) any business or any corporation, partnership, association or other business organization or division thereof other than the acquisition of supplies, inventory and equipment in the Ordinary Course of Business;

(l) make any investment (by contribution to capital, property transfers, purchase of securities or otherwise) in, or loan or advance funds to any Person (other than travel and similar advances to its Employees in the Ordinary Course of Business in an aggregate amount at any one time of not more than $10,000);

(m) with respect to Contracts, (i) enter into, adopt, terminate, modify, renew or amend (including by accelerating material rights or benefits under) any Material Contract (or any Contract that would constitute a Material Contract if in effect on the Agreement Date), (ii) enter into any Contract that could be breached by, or require the consent of any third party in order to continue in full force following consummation of the Transactions, or (iii) release any Person from, or modify or waive any material provision of, any confidentiality or non-disclosure agreement;

(n) (i) hire or terminate any employees, (ii) increase the annual level of compensation payable or to become payable by the Company to any of its directors or Current Employees, (iii) grant any bonus, benefit or other direct or indirect compensation to any director, Current Employee or Current Consultant other than in the Ordinary Course of Business, (iv) increase the coverage or benefits available under or otherwise modify or amend or terminate any (or create any new) Company Plan, except as required by applicable Law or by the terms of any Company Plan, (v) enter into any employment, deferred compensation, severance, consulting, non-competition or similar agreement to which the Company is a party (or amend any such agreement in any respect) or enter into any agreement involving a Current Employee or Current Consultant, except, in each case, as required by applicable Law from time to time in effect or by the terms of any Company Plan or (vi) enter into any Related Party Transaction;

(o) make, change or revoke any election concerning Taxes or Tax Returns, file any amended Tax Return or any Tax Return inconsistent with past practice, enter into any closing agreement or Contract with any Taxing Authority with respect to Taxes, settle any Tax claim or assessment (other than by paying Taxes in the Ordinary Course of Business), surrender any right to claim a refund of Taxes, request any Tax ruling or agree to an extension or waiver of the statute of limitations with respect to the assessment or determination of Taxes;

(p) make any changes in financial or tax accounting methods, principles or practices (or change an annual accounting period), except as required by applicable Law;

(q) amend the Company’s Charter Documents;

(r) adopt a plan or agreement for or carry out any complete or partial liquidation, dissolution, restructuring, recapitalization, merger, consolidation or other reorganization other than as required by the provisions of this Agreement;
pay, repurchase, prepay, discharge, settle or satisfy any claim, liability or obligation (absolute, accrued, asserted
or unasserted, contingent or otherwise) in excess of $10,000 in any one instance or $50,000 in the aggregate, other than the payment,
discharge, settlement or satisfaction in accordance with the terms of the Liabilities reflected in the Balance Sheet;

(t) initiate, settle, agree to settle, waive or compromise any Action;

(u) accelerate, beyond the normal collection cycle, collection of accounts receivable or delay beyond normal
payment terms payment of any accounts payable;

(v) accelerate or defer the construction of any premises;

(w) accelerate or defer the purchase of fixtures, equipment, leasehold improvements or other capital expenditures;

(x) grant or agree to grant any license to any of the Company’s Intellectual Property Rights;

(y) hire, appoint or, except as required by the terms of this Agreement, terminate any director or officer of the
Company;

(z) enter into any lease (either as lessor or lessee) or other form of use or occupancy agreement for the use or
occupancy of any real property or amend, in any respect, or terminate any of the Real Property Leases; or

(aa) agree to take any of the foregoing actions.

Nothing contained in this Agreement shall give Buyer, directly or indirectly, rights to control any operations of the Company prior to
the Closing.

6.2 Actions Required to Consummate Transactions. Subject to the terms and conditions of this Agreement, from the
Agreement Date until the Closing Date or the earlier termination of this Agreement pursuant to Article VIII (Termination), each of
the Parties shall use (and shall cause its Affiliates to use) commercially reasonable efforts to promptly (i) take, or cause to be taken,
al actions and do, or cause to be done, all things necessary, proper or advisable to cause the conditions to closing of the other Parties
hereunder to be satisfied and to consummate and make effective the Transactions, in each case, as expeditiously as practicable, and
(ii) obtain all approvals, consents, registrations, Permits, authorizations and other confirmations from any Governmental Authority
or third party necessary, proper or advisable to consummate the Transactions.

6.3 Governmental Authorities. Each of the Parties shall use its commercially reasonable efforts to (i) cooperate with each
other in connection with any investigation or other inquiry by or before a Governmental Authority relating to the Transactions,
including any proceeding initiated by a private party and (ii) keep the other Parties informed in all material respects and on a
reasonably timely basis of any material communication received by such Party from, or given by such Party to, any Governmental
Authority and of any material communication received or given in connection with any proceeding by a private party, in each case
regarding any of the Transactions. In furtherance
and not in limitation of the covenants of the Parties contained in this Section 6.3, each of the Parties shall use its commercially reasonable efforts to resolve such objections, if any, as may be asserted by a Governmental Authority or other Person with respect to the Transactions.

6.4 Public Announcements. Unless otherwise required by (i) applicable Law, (ii) stock exchange requirements, or (iii) any disclosure made in connection with the enforcement of any right or remedy relating to this Agreement or the transactions contemplated hereunder, no Party to this Agreement other than Buyer shall at any time make any public announcement or disclosure in respect of this Agreement or the transactions contemplated hereby or otherwise communicate with any news media with respect to this Agreement or the transactions contemplated hereby without the prior written consent of the other Parties (which consent shall not be unreasonably withheld or delayed).

6.5 Access to Information. Subject to the requirements of applicable Law and redaction of any commercially sensitive pricing information with respect to the Company’s customers or payors, the Sellers shall, and shall cause the Company to, afford to Buyer and Buyer’s Representatives, from time to time prior to the earlier of (i) the Closing or (ii) the termination of the Agreement pursuant to Section 8.1, access during normal business hours upon reasonable advance notice to (x) all of the Company’s Premises, books, reports, Contracts, assets, filings with and applications to Governmental Authorities, records and correspondence (in each case, whether in physical or electronic form) and (y) to the Representatives of the Company as Buyer may reasonably request and the Company shall furnish to Buyer, as promptly as practicable, all information and documents concerning its business, financial condition and operations, properties and personnel related to the consummation of the Transactions or the ownership or operation of the Company’s business as Buyer may reasonably request and Buyer shall be allowed to make copies of such information and documents at Buyer’s sole expense.

6.6 Confidentiality. The Sellers acknowledge that the success of the Company after the Closing Date depends upon the preservation of the confidentiality of the Confidential Information (as hereinafter defined), that the preservation of the confidentiality of the Confidential Information is an essential premise of the bargain between the Parties and Buyer would be unwilling to enter into this Agreement in the absence of this Section 6.6. Accordingly, the Sellers, shall, and shall use their commercially reasonable efforts to cause their Affiliates and their respective Representatives to, keep confidential all documents and information involving or relating to the Company or its business (the “Confidential Information”) unless (i) compelled to disclose such Confidential Information by Law so long as, to the extent permitted by Law, reasonable prior notice of such disclosure is given to Buyer and the Company and a reasonable opportunity is afforded Buyer and the Company to contest the same; (ii) disclosed in an Action brought by a Party in pursuit of its rights or in the exercise of its remedies hereunder; or (iii) Seller receives Buyer’s prior written consent. The term “Confidential Information” as used herein does not include information that, at the time of disclosure, is generally available to and known by the public (other than as a result of its disclosure by a Seller or its Affiliate in violation of this Agreement). The provisions of this Section 6.6 shall survive the Closing Date indefinitely.
6.7 Notification of Certain Matters. The Sellers shall provide (or, with respect to any non-written notice or threat referred to below, shall use commercially reasonable efforts to provide) written notice to Buyer within one (1) Business Day after becoming aware (i) that any representation or warranty made by any Seller in this Agreement was untrue when made or subsequently has become untrue, (ii) of any failure by any Seller to comply with or satisfy any of its covenants or agreements hereunder, (iii) of the occurrence or nonoccurrence of any event that could reasonably be expected to cause any condition precedent to any obligation of Buyer to consummate the Transactions not to be satisfied at or prior to the Closing Date, (iv) of any notice or other communication from any Person alleging that the consent of such Person is or may be required in connection with the Transactions, to the extent such consent is not already contemplated by this Agreement or the Disclosure Schedule, (v) of any notice or other communication from any Governmental Authority in connection with the Transactions, (vi) of the commencement or threat of commencement of any Action regarding the Transactions or otherwise relating to the Company or its business, or (vii) of any other development materially and adversely affecting the assets, Liabilities, business, financial condition or operations of the Company; provided, however, that neither the delivery of any notice pursuant to this Section 6.7 nor obtaining any information or knowledge in any investigation pursuant to Section 6.5 or otherwise shall (x) cure any breach of, or non-compliance with, any representation or warranty requiring disclosure of such matter, or any breach of any other provision of this Agreement, (y) amend or supplement any scheduled disclosure made by the Sellers in Article III or Article IV, except that any Material Contracts entered into after the Agreement Date with the prior written consent of Buyer in accordance with Section 6.1 shall automatically be deemed to be added to Section 4.12(a) of the Disclosure Schedule, or (z) limit the remedies available to the Party receiving, or entitled to receive, such notice.

6.8 Tax Matters.

(a) Seller Prepared Tax Returns. The Sellers shall, at Sellers’ sole cost and expense, prepare and timely file (or cause the same to be done), on behalf of the Company all Tax Returns relating to any taxable period of the Company ending on and as of the Closing and with respect to which Tax Returns the Company’s items of income, gain, loss, profit, deduction, expense or credit are required to be reported to the Sellers on a “pass-through” basis (the “Pass Through Income Tax Returns”). Each Pass Through Income Tax Return shall be prepared in a manner consistent with the past practice of the Company.

(b) Buyer Prepared Tax Returns. Buyer shall prepare or cause to be prepared and file or cause to be filed all Tax Returns of the Company that are due after Closing (other than Pass Through Income Tax Returns). To the extent any Tax Return prepared by Buyer includes a Pre-Closing Tax Period, Buyer shall provide copies of such Tax Return to the Sellers’ Representative for review and approval prior to filing, and Buyer shall not file such Tax Return without the prior written consent of Sellers’ Representative, which consent shall not be unreasonably withheld, conditioned or delayed.

(c) Tax Contests.

(i) After the Closing, each of Buyer, on the one hand, and Sellers’ Representative, on the other hand, shall promptly notify the other Party in writing upon receipt from
a Taxing Authority of any written notice of any pending or threatened audit, examination, claim, dispute or controversy relating to Taxes with respect to the Company for a Pre-Closing Tax Period or with respect to which such other Party (or any of its Affiliates) could be liable pursuant to this Agreement; provided, however, the failure to give such notice shall not affect the indemnification provided hereunder except to the extent the Indemnifying Party has been materially prejudiced as a result of such failure.

(ii) If Buyer or any Affiliate of Buyer receives notice of any Tax audit by a Taxing Authority that relates to the Company with respect to any Pre-Closing Tax Period, Buyer shall inform Sellers’ Representative of such notice; provided, however, the failure to give such notice shall not affect the indemnification provided hereunder except to the extent Sellers have been materially prejudiced as a result of such failure. With respect to each Tax audit described in the immediately preceding sentence that relates to a Pre-Closing Tax Period, Buyer shall allow the Sellers the opportunity to elect, through Sellers’ Representative, solely at the Sellers’ own cost and expense, to control all proceedings in connection with such audit, provided, however, that (x) Sellers’ Representative (on behalf of the Sellers) shall keep Buyer reasonably informed of all material developments regarding such audit, and shall not settle all or any material portion of such tax audit without the written consent of Buyer, which consent shall not be unreasonably withheld, conditioned or delayed, and (y) Buyer and its counsel (at Buyer’s expense) may participate in (but not control the conduct of) the defense of such audit.

(iii) With respect to any Tax Claim other than those for which Sellers have elected to control as described in the immediately preceding paragraph, Buyer shall control all proceedings in connection with such Tax Claim; provided, however, that to the extent that any such Tax Claim could reasonably be expected to result in the Sellers being liable for any material amounts hereunder, (x) Buyer shall keep Sellers’ Representative reasonably informed of all material developments regarding such Tax Claim, (y) Sellers’ Representative and its counsel (at the Sellers’ expense) may participate in (but not control the conduct of) the defense of such Tax Claim, and (z) Buyer shall not settle such Tax Claim without the written consent of Sellers’ Representative, which consent shall not be unreasonably withheld, conditioned or delayed.

(i) In the event of any conflict between the provisions of this Section 6.8(c), and the provisions of Section 9.4(a), the provisions of this Section 6.8(c) shall control.

(d) Certification. Buyer and Sellers’ Representative agree, upon request from the other Party, to use their commercially reasonable efforts to obtain any certificate or other document from any Taxing Authority or any other Person as may be necessary to mitigate, reduce or eliminate any Tax that could be imposed (including, but not limited to, with respect to the contemplated Transactions).

(e) Tax Sharing Agreements. The Sellers shall cause the Company to terminate all Tax Sharing Agreements with respect to the Company as of the Closing Date and shall ensure that such agreements are of no further force or effect on and after the Closing Date and that there shall be no further liabilities or obligations imposed on any of the Company under any such agreements.
Cooperation. Following the Closing Date, Buyer and Sellers’ Representative shall, as reasonably requested by any Party: (i) assist any other Party in preparing and filing any Tax Returns relating to the Company that such other Party is responsible for preparing and filing; (ii) cooperate in preparing for any Tax audit of, or dispute with any Taxing Authority regarding and any judicial or administrative proceeding relating to, liability for Taxes, in the preparation or conduct of litigation or investigation of claims and in connection with the preparation of financial statements or other documents to be filed with any Taxing Authority, in each case with respect to the Company; (iii) make available to the other Parties and to any Taxing Authority as reasonably requested all information, records and documents in its possession relating to Taxes relating to the Company (at the cost and expense of the requesting Party); (iv) provide timely notice to the other Parties in writing of any pending or threatened Tax audits or assessments relating to the Company for taxable periods for which any such other Party is responsible; and (v) furnish the other Parties with copies of all correspondence received from any Taxing Authority in connection with any Tax audit or information request with respect to any taxable periods (or portion thereof) for which any such other Party is responsible. For the avoidance of doubt, the cooperation noted in this Section 6.8(f) shall include signing any Tax Returns, amended Tax Returns, claims or other documents with respect to any audit, litigation or other proceedings with respect to Taxes, the retention and (upon the other Party’s reasonable request) the provision of records and information which are reasonably relevant to any such audit, litigation or other proceeding and making employees available on a mutually convenient basis to provide additional information and explanation of any material provided hereunder.

(a) Certain Tax Elections. Notwithstanding any other provisions or agreements to the contrary, each of the Parties agree that each of the Parties, and their respective Affiliates, shall cause the Company (and shall cooperate with each other Party upon request of such other Party to cause the Company) to timely and validly make an election pursuant to Section 6226(a) of the Code (i.e. a so-called “push-out” election) in the event of and with respect to any imputed underpayments of or with respect to the Company for any period (or portion thereof) ending on or prior to the Closing Date.

(b) Amended Tax Returns. Buyer shall not cause or permit the Company or any Affiliate of Buyer to amend any Tax Return of or with respect to the Company that relates to Taxes that are subject to indemnification by the Sellers hereunder without the prior written consent of Sellers’ Representative (which consent shall not be unreasonably withheld, conditioned or delayed); provided, however, that no such consent shall be required for the filing of any Tax Return or an amendment of any Tax Return of the Company that is required by applicable Tax Law.

(c) Transfer Taxes. The Sellers shall be solely liable and responsible for any real property transfer or gains tax, stamp tax, unit transfer tax, or other similar Tax imposed as a result of or in connection with the Transactions (collectively, the “Transfer Taxes”), and any penalties or interest with respect to the Transfer Taxes. The Parties shall cooperate in filing all necessary Tax Returns and other documentation with respect to the Transfer Taxes.

(d) Tax Treatment. Each of the Parties agrees that the purchase of the Company Units by Buyer from Sellers pursuant to this Agreement is intended by each of the Parties to be
treated and classified for all U.S. federal and applicable state and local Tax purposes in accordance with Revenue Ruling 99-6 as follows: (i) as to Buyer, as the purchase by Buyer of all of the assets of the Company pursuant to Section 1001(a) of the Code, and (ii) as to Sellers, as the sale of their respective interests in the Company, pursuant to Sections 741 and 1001(a) of the Code. Each of the Parties agrees to prepare file all Tax Returns and relating filings in a manner which is not inconsistent with such intentions, unless otherwise required by applicable Law following challenge thereto by any Taxing Authority. For purposes of Section 1060 of the Code and the Treasury Regulations promulgated pursuant thereto, the amounts which Buyer is treated for U.S. federal and applicable Tax purposes as paying as purchase price for the Company Units (and/or other consideration received by Buyer pursuant to or in connection with the transactions contemplated by this Agreement) shall be allocated in accordance with Section 1060 of the Code and the Treasury Regulations thereunder among the assets of the Company for all purposes (including all Tax and financial accounting purposes) in accordance with their respective fair market values, and Buyer and Sellers further agree that (x) as soon as reasonably practicable but in any event within one hundred twenty (120) days following the Closing, Buyer shall in good faith determine and prepare a draft of IRS Form 8594 setting forth the allocation of the such purchase price, as determined under relevant U.S. federal income Tax principles among the assets of the Company, and (y) Sellers’ Representative (on behalf of all Sellers) shall review such Form 8594 and provide (on behalf of all Sellers) any proposed revisions to Buyer within fifteen (15) days after receipt thereof, and Buyer and Sellers’ Representative (on behalf of all Sellers) shall endeavor in good faith to resolve any disputes with respect thereto. Except as Buyer and Sellers’ Representative may otherwise agree or as may be required otherwise pursuant to a final determination within the meaning of Section 1313(a) of the Code or a corresponding provision of state, local or foreign Tax law, the Parties (A) will, and will cause each of their respective Affiliates to, prepare and file all Tax Returns in a manner consistent with the immediately preceding sentence, and (B) will not, and will cause each of their respective Affiliates not to, take any position inconsistent with the immediately preceding sentence, unless required by an applicable Law. Notwithstanding anything to the contrary in this Section 6.8, in the event Buyer and Sellers’ Representative fail to reach an agreement regarding the preparation of the IRS Form 8594, then Buyer and Sellers shall refer the matter to an independent, nationally recognized accounting firm selected by Buyer and Sellers’ Representative for resolution. The decision of such accounting firm shall be final and binding upon all Parties. The Buyer shall pay one-half the cost of the accounting firm and the Sellers shall pay one-half of the cost of the accounting firm.

(e) **Straddle Periods.** For all applicable purposes of this Agreement, the amount of Taxes for a Straddle Period that shall be treated as allocable to a Pre-Closing Tax Period (i) in the case of any Taxes (x) based on or measured by income, profits, receipts, capital or net worth of the Company, (y) imposed in connection with the sale, transfer or assignment of property by the Company or (z) required to be withheld by the Company, shall be determined based on an interim closing of the books as of the close of business on the Closing Date, and (ii) in the case of any other Taxes (such as *ad valorem* Taxes), shall be equal to the product of the amount of such Taxes for the entire Straddle Period multiplied by a fraction, the numerator of which is the number of calendar days in the Straddle Period before and including the Closing Date and the denominator of which is the total number of calendar days in the entire Straddle Period.

6.9 **Non-Competition, Non-Solicitation and Non-Hire Covenants.**
(a) During the Restrictive Term, each Seller shall not, and shall cause its Affiliates not to, directly or indirectly, (i) acquire, finance, own any interest in, manage, control, participate in, consult with, render services for, operate or in any manner engage in a Competitive Business, (ii) for the purpose of conducting or engaging in a Competitive Business, call upon, solicit, advise or otherwise do, or attempt to do, business with any clients, suppliers, customers, accounts of the Company, Buyer or any other material business relation of the Company or Buyer, or (iii) otherwise take any action that is designed or intended to have the effect of discouraging any lessor, licensor, customer, supplier or other business relation of the Company or Buyer from maintaining the same business relationships with such Person after the Closing Date as it maintained with such Person prior to the Closing Date; provided, however, that no Seller nor any of its respective Affiliates shall be prohibited from owning up to two percent (2%) of the outstanding stock of any Person that is publicly traded on a national securities exchange or in the over-the-counter market so long as such Seller or any of its Affiliates has no active participation in the business or management of such Person. Notwithstanding the foregoing restriction, nothing herein shall prevent Chris Howlett from (i) rendering services for any Person that offers a menu of pathology and clinical laboratory testing and/or genetic testing that includes pharmacogenetic testing, so long as pharmacogenetic testing is not the primary testing service offered by the Person and Chris Howlett does not participate in or provide input regarding the delivery, marketing, development, or commercialization of pharmacogenetic testing solutions and related services or (ii) serving in a management position for, or having an ownership interest in, a Person that offers a menu of pathology and clinical laboratory testing and/or genetic testing that includes pharmacogenetic testing and related services so long as pharmacogenetic testing does not account for more than 5% of the annual testing volumes or revenues of such Person, Chris Howlett is not directly responsible for pharmacogenetic testing and related services, and Chris Howlett does not provide input regarding the delivery, marketing, development, or commercialization of pharmacogenetic testing solutions and related services.

(b) During the Restrictive Term, each Seller shall not, and shall cause its Affiliates not to, directly or indirectly, (i) induce or attempt to induce any officer, employee, representative or agent of the Company or Buyer engaged in the Business to leave the employ of the Company or Buyer (provided, that this clause (i) shall not prohibit any Person from making general employment solicitations such as through advertisements in publicly available media so long as such advertisements are not specifically targeted at employees of the Company or Buyer) or (ii) in any other way interfere with the employment relationship between the Company or Buyer, on the one hand, and any employee of the Company or Buyer engaged in the Business, on the other.

(c) During the Restrictive Term, each Seller shall not, and shall cause its Affiliates not to, directly or indirectly, make or solicit or encourage others to make or solicit directly or indirectly any derogatory or negative statement or communication about Buyer, the Company or any of their respective businesses, products, services or activities; provided, that such restriction shall not prohibit truthful testimony compelled by valid legal process.

(d) Each Seller acknowledges and agrees that the length of the covenants set forth in this Section 6.9 are reasonable and narrowly drawn to impose no greater restraint than is necessary to protect the goodwill of Buyer and, after giving effect to the consummation of the transaction, the Company with respect to the Business.
Buyer and each Seller intend that the covenants of this Section 6.9 shall be deemed to be a series of separate covenants, one for each month of the time periods covered by such covenants.

Each Seller agrees that in the event a court of competent jurisdiction declares, by way of a final and non-appealable order, that there has been a breach by such Seller of this Section 6.9, the term of any covenant so breached shall be automatically tolled with respect to such Seller as a result of, and extended for, the period of time of the violation.

6.10 **Release.** Each Seller does hereby unconditionally, irrevocably and absolutely release and discharge the Company, together with its directors, officers, employees, agents, advisors, consultants, attorneys, owners, insurers, shareholders, affiliates, successors and/or assigns (collectively, with the Company as well as the other Buyer Indemnified Persons (defined below), the “Released Parties”), from any and all Liabilities, Actions, Losses and expenses (including attorneys’ fees) of any nature whatsoever, whether in law and/or in equity, known or unknown, suspected or unsuspected, related directly or indirectly or in any way connected with any transaction, affair, occurrence or circumstance between such Seller and any Released Party up to and including the Closing Date, including such Seller’s employment with the Company, and any and all claims (other than for accrued compensation since the Company’s last payroll in the Ordinary Course of Business, any accrued vacation in accordance with the Company’s policy in the Ordinary Course of Business, and any pending expense reimbursements in accordance with the Company’s policy in the Ordinary Course of Business) related to salary, bonuses, commissions, equity, rights to purchase equity, other ownership interest in the Company, vacation pay, fringe benefits and expense reimbursements under any federal, state or local law. This release shall include but not be limited to a release of claims arising under any state or federal statute or common law regulating or affecting employment in any way, regardless of applicability to such Seller or any Released Party, including Title VII of the Civil Rights Act of 1964, 42 U.S.C. §1981, the Age Discrimination in Employment Act, the Americans with Disabilities Act, Sections 503 and 504 of the Rehabilitation Act of 1973, the Employee Retirement Income Security Act, the Equal Pay Act, the Family and Medical Leave Act, the Occupational Safety and Health Act, the Workers’ Adjustment and Retraining Notification Act, as amended, the Fair Labor Standards Act, the Workers’ Adjustment and Retraining Notification Act, as amended, the Fair Labor Standards Act, and any other federal, state or local statute, code or ordinance, common law, contract law, or tort. This release shall also include but not be limited to a release of claims arising with respect to any Liability for any Taxes (i) of such Seller, (ii) in respect of such Seller’s Company Units (including all Company Units issued as a result of the Note Conversions, and whether Taxes of the Company, such Seller or otherwise), including as to the issuance of such Company Units to such Seller or the vesting of such Company Units, and (iii) in respect of the transactions contemplated by this Agreement to the extent applicable to Seller (including delivery of shares of Buyer’s Common Stock and cash to such Seller in payment for such Seller’s Company Units). This **Section 6.10** is intended to constitute a general release of all of such Seller’s presently existing claims against each of the Released Parties, to the maximum extent permitted by law. Notwithstanding any provision of this **Section 6.10** to the contrary, this release does not include any claim for worker’s compensation or unemployment insurance benefits, or any claim based on fraud or intentional misrepresentation or omission with intent to deceive, and does not release or affect any claim that cannot be released by an agreement voluntarily entered.
into between private parties. Notwithstanding any provision of this Section 6.10 to the contrary, this release does not release any rights held by the Sellers pursuant to this Agreement.

6.11 Employment Related Agreements. As promptly as practicable after the Agreement Date, the Sellers shall cause the Company to use commercially reasonable efforts to cause each Current Employee identified on Exhibit B hereto (the “Continuing Employees”) to execute and deliver to Buyer an offer letter and, to the extent indicated on Exhibit B hereto, a non-competition agreement, in each case substantially in the form(s) attached hereto as Exhibit C, which agreements shall become binding and effective as of the Closing Date (collectively, the “Employment Documents”).


(a) Continuing Employees. Notwithstanding anything to the contrary set forth in this Agreement, nothing in this Agreement shall be deemed to give rise to any obligation by Buyer to retain any Current Employee, any group of Current Employees of the Company or any Company Plan following the Closing Date. Continuing Employees shall become eligible to participate in any welfare benefit plan or pension plan (intended to qualify under Section 401(a) of the Code) of Buyer (each a “Buyer Plan”) on the same basis as other employees of Buyer, and shall receive credit for purposes of eligibility and vesting for years of service with the Company prior to the Closing to the extent that such service was recognized under the corresponding Company Plan prior to the Closing; provided that such service shall not be recognized if and to the extent that it would result in the duplication of benefits or is not possible or practical under a Buyer Plan. For clarity, service credit shall not be given for benefit accrual, early retirement subsidies or entitlement purposes under any Buyer Plan and shall not be given for any purpose under any Buyer plans or programs other than welfare benefit plans or pension plans, including any equity plans, but excluding any personal time off plans and vacation programs. Continuing Employees may roll over from the Company 401(k) Plan to the extent permitted in Buyer’s 401(k) plan.

(b) Company Plans. The Sellers shall cause the Company to cease contributions to and terminate the Company’s 401(k) Plan and any other Company Plans specified by Buyer effective immediately prior to Closing (one day prior to Closing in the case of any Company Plan intended to qualify under Section 401(a) of the Code). Any such cessation or termination shall be undertaken (i) in accordance with the governing documents and Contracts for the Company Plans (including through plan amendment) and (ii) in conformance with applicable Laws.

(c) No Third-Party Beneficiaries. This Section 6.12(c) is not intended to amend any benefit plans or arrangements of Buyer or any of its Subsidiaries, to limit the ability of Buyer or any of its Subsidiaries to amend, modify or terminate any of such benefit plans or arrangements or to confer third-party beneficiary rights on any Person (including any Current Employee or any beneficiary or dependent thereof).

6.13 No Negotiations, Etc. The Sellers shall not, and shall cause the Company and their respective Representatives not to, directly or indirectly solicit, initiate, or enter into any discussions or negotiations or continue in any way any discussions or negotiations with any Person or group of Persons regarding any Competing Transaction. The Sellers shall promptly but not later than forty-
eight (48) hours following the occurrence of the relevant event notify Buyer in writing if any inquiries, proposals, or requests for information concerning a Competing Transaction are received by the Company, the Sellers or any of their respective Representatives. The written notice shall include the identity of the Person making such inquiry, proposal, or request and the terms and conditions thereof as well as a copy of such inquiry proposal or request. For purposes of this Agreement, “Competing Transaction” means a transaction or a series of related transactions (other than the Transactions) involving (i) any sale of Company Units or other equity interests in the Company, (ii) a merger, consolidation, share exchange, business combination or other similar transaction involving the Company, (iii) any sale, lease, exchange, license (other than in the Ordinary Course of Business), mortgage, pledge, transfer or other disposition of substantial assets of the Company (other than disposition of inventory in the Ordinary Course of Business), or (iv) any other transaction or series of transactions which could reasonably preclude the consummation of the Transactions.

6.14 Registration of Shares. Buyer agrees to register for public resale (i) the Upfront Stock Consideration Shares, and (ii) the Earnout Shares, if any, in each case on a Form S-3ASR (assuming Buyer remains eligible for the use of such form, otherwise on a Form S-3) as promptly as reasonably practicable following the applicable date of issuance pursuant to the registration rights agreement substantially in the form attached hereto as Exhibit D (the “Registration Rights Agreement”); provided, however, that any Earnout Shares that are otherwise eligible for immediate resale without restriction under Rule 144 of the Securities Act need not be registered. Notwithstanding anything herein to the contrary, following registration of the Upfront Stock Consideration Shares, each Seller agrees not to sell any shares of Buyer’s Common Stock issued to such Seller as a result of the Transactions, if the sale of such shares would, when combined with the sale of any other shares of Buyer’s Common Stock by such Seller on any one (1)-day period, exceed five percent (5%) of the average daily trading volume of Buyer’s Common Stock on the New York Stock Exchange over the five (5) trading days preceding such date of sale; provided, however, that if the aggregate number of Upfront Stock Consideration Shares represents less than fifty percent (50%) of the average daily trading volume of Buyer’s Common Stock on the New York Stock Exchange over the five (5) trading days preceding the Closing, such resale volume limitations shall not apply.

6.15 D&O Indemnification.

(a) The Parties agree that all rights to exculpation, indemnification and advancement of expenses for acts or omissions occurring at or prior to the Closing, whether asserted or claimed prior to, at or after the Closing, now existing in favor of the current or former managers, officers, employees, or agents, as the case may be, of the Company and any person who served on behalf of the Company as a manager, officer, employee or agent of any of the Company’s current or former Affiliates (each, a “Company Indemnitee”) as provided in the organizational documents of the Company as in effect on the date of this Agreement shall survive the Closing and shall continue in full force and effect.
(b) Buyer shall cause the Company to maintain in effect any and all exculpation, indemnification and advancement of expenses provisions currently existing in the organizational documents of the Company in effect as of the date of this Agreement, for acts or omissions occurring at or prior to the Closing.

6.16 Privileged Matters.

(a) Each of the Parties acknowledges and agrees that Davis Wright Tremaine LLP (the “Deal Counsel”) has acted as counsel to the Company and its Affiliates in connection with the negotiation of this Agreement and any consummation of the transactions contemplated by this Agreement. In that capacity, the Deal Counsel has engaged or may engage in communications with (i) other counsel to the Company, (ii) the Sellers and their Affiliates, and (iii) advisors and consultants to any of the foregoing that relate to the negotiation, documentation and consummation of the transactions contemplated by this Agreement (“Deal Communications”).

(b) Buyer consents and agrees to the Deal Counsel representing any or all of the Sellers and their Affiliates after the Closing, including with respect to disputes in which the interests of the Sellers and their Affiliates may be directly adverse to the interests of Buyer and its Affiliates, and even though the Deal Counsel may have represented the Company in a matter substantially related to any such dispute, or may be handling ongoing matters for the Sellers and their Affiliates. Buyer further consents and agrees to the use by the Deal Counsel and the Sellers and their Affiliates in connection with any such representation of any information known or obtained in connection with the representation described in Section 6.16(a) above.

(c) In connection with the foregoing, Buyer irrevocably waives any conflict of interest arising from or in connection with (i) the Deal Counsel’s prior representation of the Company and (ii) the Deal Counsel’s representation of the Sellers and their Affiliates prior to and after the Closing.

(d) Subject to Section 6.16(e), Buyer, on the one hand, and the Sellers, on the other hand, acknowledge and agree that the information relating to or arising out of the legal advice or services that have been provided prior to the Closing for the benefit of both (i) the Sellers and their Affiliates (other than the Company) and (ii) the Company, shall be subject to a shared privilege between the Sellers and such Affiliates (other than the Company), on the one hand, and the Company, on the other hand, and the Sellers and such Affiliates and the Company shall have equal right to assert all such shared privileges in connection with privileged information under any Law and no such shared privilege may be waived after the Closing by (A) the Sellers or their Affiliates without the prior written consent of Buyer or the Company or (B) by the Company, Buyer or any of their respective Affiliates without the prior written consent of the Sellers’ Representative.

(e) Buyer acknowledges and agrees, on its own behalf and on behalf of its directors, stockholders, members, partners, officers, employees and Affiliates, that all Deal Communications shall be deemed to be retained, owned and controlled collectively by the Sellers and their Affiliates (other than the Company) and shall not pass to or be claimed by Buyer or, following the Closing, the Company, even if such communications are in the possession of the Company. All Deal Communications that are subject to the attorney-client privilege or the attorney...
work product privilege (the “Privileged Deal Communications”) shall remain privileged after the Closing, with the privilege belonging solely to the Sellers and not Buyer.

(f) In the event that a dispute arises between Buyer or the Company and a third party, Buyer and the Company shall assert the attorney-client privilege to prevent the disclosure of Privileged Deal Communications to such third party. In the event that Buyer or the Company is asked by any third party, for example in connection with a legal proceeding, to access or obtain any of the Privileged Deal Communications, Buyer shall (or shall cause the Company, as applicable, to) promptly (and, in any event, within three (3) Business Days) notify the Sellers’ Representative in writing (including by making specific reference to this Section 6.16(f)). Buyer further agrees to use (and to cause the Company to use) commercially reasonable efforts to assist the Sellers’ Representative in connection with any attempt to prevent the disclosure of any Privileged Deal Communications to a third party.

(g) Buyer agrees that it will not access, use, or seek to obtain the Deal Communications in any way. In the event that any Deal Communication remains accessible to Buyer or the Company after the Closing, Buyer agrees that neither it nor any of its Affiliates or Representatives will attempt to gain access to or view any Deal Communication for any purpose. Notwithstanding the foregoing, nothing in this Section 6.16(g) shall require Buyer or the Company to delete or destroy any electronic records stored in the Company’s electronic records system through normal backup procedures.

6.17 Sellers’ Representations; Independent Investigation. Without limiting in any way the representations and warranties expressly set forth in Article III and Article IV as well as Buyer’s right to rely thereon:

(a) Buyer acknowledges and agrees that, other than the representations and warranties expressly set forth in Article III and Article IV, there are no representations or warranties of any Seller or any other person either expressed, statutory or implied with respect to the Company or the Company Units, including with respect to any of the Company’s rights or assets, or the Transactions, individually or collectively. Buyer, together with and on behalf of its Affiliates and Representatives, specifically disclaims that it or they are relying upon or have relied upon any such other representations or warranties that may have been made by any person, and Buyer, together with and on behalf of its Affiliates and Representatives, acknowledges and agrees that the Sellers and their Affiliates have specifically disclaimed and do hereby specifically disclaim any such other representation or warranty made by any person. Without limiting the generality of the foregoing, Buyer acknowledges and agrees that, except as expressly set forth in any representation or warranty in Article III or Article IV, none of the Sellers, their Affiliates or their respective Representatives makes any representations or warranties relating to (i) the maintenance, repair, condition, design, performance or marketability of any right or asset of the Company, including with respect to title, merchantability or fitness for a particular purpose, or validity, enforceability or non-infringement, (ii) the operation of the Company or its business by Buyer after the Closing, or (iii) the probable success or profitability of the Company or its business after the Closing.

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(a) Buyer acknowledges that it, its Affiliates and their respective Representatives have been permitted access to the books and records, facilities, equipment, personnel, Contracts and other properties and assets of the Company that it, its Affiliates and their respective Representatives have desired or requested to see and review, and that it, its Affiliates and their respective Representatives have had an opportunity to meet with the employees of the Company to discuss the Company and its business.

(b) Buyer, its Affiliates and their respective Representatives may have received from the Sellers, their Affiliates and their respective Representatives certain estimates, projections and other forecasts for the Company and certain plan and budget information. Buyer acknowledges that any such estimates, projections, forecasts, plans and budgets, and the assumptions on which they are based, were prepared for specific purposes and may vary significantly from each other. Further, Buyer acknowledges that there are uncertainties inherent in attempting to make such estimates, projections, forecasts, plans and budgets, that Buyer is taking full responsibility for making its own evaluation of the adequacy and accuracy of all estimates, projections, forecasts, plans and budgets so furnished to it, its Affiliates or their respective Representatives (including the reasonableness of the assumptions underlying such estimates, projections, forecasts, plans and budgets) and that, except as expressly set forth in any representation or warranty in Article III or Article IV, Buyer is not relying on any estimates, projections, forecasts, plans or budgets made available or otherwise furnished by the Sellers, their Affiliates or their respective Representatives, and Buyer shall not, and shall cause its Affiliates and their respective Representatives not to, hold any such person liable with respect thereto (whether in warranty, contract, tort (including negligence or strict liability) or otherwise), except in connection with any representation or warranty expressly set forth in Article III or Article IV.

ARTICLE VII

CONDITIONS TO CLOSING

7.1 Conditions to Obligations of Buyer. The obligations of Buyer to effect the Transactions are subject to the satisfaction (or waiver by Buyer) at or prior to the Closing of the following conditions:

(a) Representations and Warranties. All of the representations and warranties of the Sellers contained in Article III and Article IV of this Agreement that are qualified by “materiality”, “Company Material Adverse Effect” or a similar qualifier shall be true and correct in all respects, and each of such representations and warranties that is not so qualified shall be true and correct in all material respects, in each case, at and as of the Closing Date, except for representations and warranties made as of a specified date, the accuracy of which will be determined only as of the specified date; provided, however, that the Seller Fundamental Representations shall be true and correct in all respects at and as of the Closing Date.

(b) Performance of Obligations of Sellers. The Sellers shall have performed in all material respects all covenants, agreements and obligations required to be performed by them under this Agreement at or prior to the Closing; provided that, with respect to any such covenants,
agreements or obligations which are subject to “materiality”, “Company Material Adverse Effect”, substantial compliance or similar materiality qualifications, the Sellers shall have performed such covenants, agreements and obligations in all respects.

(c) **No Litigation.** No Action shall have been instituted, commenced or threatened and no Action shall remain pending that seeks to or could reasonably be expected to (i) restrain, prevent, enjoin, prohibit or make illegal the Transactions, (ii) cause any of the Transactions to be rescinded following the Closing Date, (iii) impose limitations on the ability of the Company to effectively conduct its business following the Closing Date or (iv) compel Buyer, Sellers or the Company to dispose of any portion of the Company’s business or assets.

(d) **No Material Adverse Effect.** Since the Agreement Date, no Company Material Adverse Effect shall have occurred.

(e) **No Injunctions or Restraints.** No Order shall be in effect (i) enjoining, restraining, preventing or prohibiting consummation of the Transactions, (ii) causing any of the Transactions to be rescinded following the Closing Date, (iii) imposing limitations on the ability of the Company to effectively conduct its business following the Closing Date or (iv) compelling Buyer or the Company to dispose of any portion of the Company’s business or assets.

(f) **Governmental Consents.** All filings with and consents of any Governmental Authority required to be made or obtained in connection with the Transactions shall have been made or obtained and shall be in full force and effect and any waiting period under any applicable antitrust or competition law, regulation or other Law shall have expired or been terminated.

(g) **Delivery of Closing Certificates.** Buyer shall have received:

(i) **Closing Certificate.** A certificate dated as of the Closing Date, signed by the Chief Executive Officer or the Chief Financial Officer of the Company certifying that the conditions precedent set forth in Section 7.1(a), Section 7.1(b), Section 7.1(c), Section 7.1(d), Section 7.1(e) and Section 7.1(f) have been met;

(ii) **Allocation Schedule Certificate.** A certificate dated as of the Closing Date, signed by the Chief Executive Officer or the Chief Financial Officer of the Company certifying that the Allocation Schedule is true and correct in all respects;

(iii) **Good Standing Certificates.** Certificates of good standing with respect to the Company issued by the Company’s jurisdiction of organization and the jurisdiction of the Company’s principal place of business, dated not more than five (5) Business Days prior to the Closing Date; and

(iv) **FIRPTA Certificate.** A written statement delivered by the Company meeting the requirements of Treasury Regulation Section 1.1445-11T(d)(2)(i), dated as of the Closing Date, and duly executed under penalties of perjury by an appropriate member of the Company meeting the requirements of Treasury Regulation Section 1.1445-11T(d)(2)(i), certifying that fifty percent (50%) or more of the value of the gross assets of the Company does not consist

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of U.S. real property interests, or that ninety percent (90%) or more of the value of the gross assets of the Company does not consist of U.S. real property interests plus cash or cash equivalents and a properly completed and duly executed IRS Form W-9 from the Company (also as of the Closing Date).

(h) **Employment Documents.** The Employment Documents described in Section 6.11 shall have been executed and delivered to Buyer at or prior to the execution of this Agreement and no such Employment Documents shall have been amended, terminated, cancelled or repudiated.

(i) **Resignation of Officers and Managers.** Buyer shall have received resignations, in form and substance reasonably satisfactory to Buyer, effective as of the Closing, from each officer and manager of the Company, other than those continuing officers and managers specified to the Sellers by Buyer in writing at least two (2) Business Days prior to the Closing Date.

(j) **Release of Liens.** Buyer shall have received payoff letters, in form and substance reasonably satisfactory to Buyer, from each lender to the Company evidencing the aggregate amount of Company Debt outstanding and owing to such lender as of the Closing Date and an agreement that, if such aggregate amount is paid to such lender on the Closing Date, such indebtedness shall be repaid in full and that all related Liens shall be released forthwith. In addition, Buyer shall have received evidence, in a form satisfactory to Buyer, that any outstanding Liens of the Company (other than Permitted Liens), any related UCC filings (other than those related to Permitted Liens) and any related filings with the USPTO Assignment Division have been terminated.

(k) **Transaction Expenses.** Buyer shall have received written statements from the Company’s outside legal counsel and any financial advisor, accountant or other Person who provided services to the Company (other than Employees who provided such services only in their capacities as such), or who is otherwise entitled to any compensation from the Company, in connection with services provided with respect to this Agreement or any of the Transactions, setting forth the total amount of unpaid Company Transaction and Bonus Expenses that remain payable to such Person with respect to services rendered through the Closing Date.

(l) **Third Party Consents.** The Sellers shall have delivered to Buyer consents of all of the third Persons specified or referenced in Exhibit E attached hereto with respect to the consummation of the Transactions contemplated by this Agreement in a form that is reasonably acceptable to Buyer.

(m) **Tax Withholding Information.** Each Seller shall have delivered to Buyer a Form W-9 (Request for Taxpayer Identification Number and Certification) or a Form W-8, as applicable, executed by such Seller.

(n) **No Plans.** The Company shall have provided Buyer with evidence reasonably satisfactory to Buyer as to the termination of Company Plans to the extent required by Section 6.12(b).
(o) **Assignment of Company Units.** Buyer shall have received evidence, in a form reasonably acceptable to Buyer, that all Company Units (including all Company Units issued as a result of the Note Conversions) have been assigned to Buyer.

(p) **Registration Rights Agreement.** The Registration Rights Agreement shall have been executed and delivered by each Seller to Buyer.

(q) **Invention Assignments.** Buyer shall have received duly executed agreements, in form and substance satisfactory to Buyer, from each of Tia Aulinskas, David Colaizzi, Chris Howlett, Alex Mitchell and Elise Mostad, pursuant to which such Employees (i) acknowledge and agree that (x) all prior inventions created during the applicable Employee’s employment relationship with the Company are assigned to the Company and (y) for Current Employees, all current or future inventions created during the applicable Employee’s employment relationship with the Company are and shall be assigned to the Company, and (iii) represent and warrant to the Company that (1) no such inventions have been previously assigned, transferred, or encumbered in any manner, and (2) such Employee has not agreed (whether by Contract or otherwise) to assign, transfer or encumber such inventions in any manner.

(r) **5 Star Development Agreement.** Buyer shall have received a duly executed agreement, in form and substance satisfactory to Buyer, between the Company and 5 Star, pursuant to which 5 Star (i) agrees that any Intellectual Property Rights previously developed or which may be developed in the future, in each case in the course of 5 Star’s performance of services for the Company, shall be owned by the Company (and assigning all rights therein to the Company), and (ii) agrees to maintain the confidentiality of the Company’s confidential or proprietary information, including any information 5 Star has received or may receive in the future regarding Company Technology, Proprietary Software and Source Code Materials.

(s) **YouScript Agreements.** That certain Strategic Agreement Including Software License Agreement dated April 5, 2019 between the Company and YouScript shall have been amended (i) to terminate the exclusivity restrictions therein binding on YouScript, (ii) to terminate any obligation of the Company to pay YouScript any portion of the consideration paid to or in respect of the Company in the event of an acquisition, and otherwise (iii) in such form and substance as shall be reasonably satisfactory to Buyer.

(t) **[*].** [*].

7.2 **Conditions to Obligation of the Sellers.** The obligation of the Sellers to effect the Transactions is subject to the satisfaction (or waiver, if permissible under applicable Law) prior to the Closing of the following conditions:

(a) **Representations and Warranties.** Each of the representations and warranties of Buyer contained in **ARTICLE V** that is qualified by “materiality”, “Buyer Material Adverse Effect” or a similar qualifier shall be true and correct in all respects, and each of such representations and warranties that is not so qualified shall be true and correct in all material respects, in each case, at and as of the Closing Date, except for representations and warranties made as at a specified date, the accuracy of which will be determined only as of the specified date; provided, however,
that the Buyer Fundamental Representations shall be true and correct in all respects at and as of the Closing Date.

(b) **Performance of Obligations of Buyer.** Buyer shall have performed in all material respects all covenants, agreements and obligations required to be performed by Buyer under this Agreement prior to the Closing.

(c) **No Material Adverse Effect.** Since the Agreement Date, no Buyer Material Adverse Effect shall have occurred.

(d) **Delivery of Closing Certificate.** The Sellers shall have received a certificate dated as of the Closing Date signed by Chief Executive Officer or Chief Financial Officer of Buyer and the certifying that the conditions precedent set forth in Section 7.2(a) and Section 7.2(b) have been met.

(e) **Registration Rights Agreement.** The Registration Rights Agreement shall have been executed and delivered by Buyer to each Seller.

**ARTICLE VIII**

**TERMINATION**

8.1 **Termination.** This Agreement may be terminated and the Transactions abandoned at any time prior to the Closing:

(a) By the mutual written consent of the Sellers and Buyer;

(b) By either the Sellers or Buyer, upon written notice to the other Party(ies), if the Transactions shall not have been consummated on or before the date which is sixty (60) days after the Agreement Date, which date may be extended from time to time by mutual written consent of Buyer and the Sellers (such date, as it may be so extended from time to time, the “Outside Date”); provided, however, that the right to terminate this Agreement under this Section 8.1(b) shall not be available to a Party whose failure to perform any of its obligations under this Agreement has been a principal cause of or directly resulted in the failure of the Transactions to occur on or before the Outside Date;

(c) By the Sellers or Buyer, if any final and non-appealable Order or any Law has the effect of enjoining, restraining, preventing, prohibiting or making illegal the consummation of the Transactions;

(d) By Buyer, if any of the representations or warranties of the Sellers set forth in Article III or Article IV shall not be true and correct or if the Sellers have failed to perform any covenant or agreement on the part of the Sellers set forth in this Agreement (including an obligation to consummate the Closing) and, in the case of the representations and warranties, measured on the Agreement Date or as of any subsequent date (as if made on such date), such that the condition to Closing set forth in either Section 7.1(a) or Section 7.1(b) would not be satisfied and the breach or
breaches causing such representations or warranties not to be true and correct, or the failures to perform any covenant or agreement, as applicable, are not cured on or prior to the earlier of (i) ten (10) days after written notice thereof is delivered to the Sellers and (ii) the Outside Date; provided that this provision shall not be available to Buyer if Buyer is then in breach of this Agreement;

(e) By the Sellers, if any of the representations or warranties of Buyer set forth in ARTICLE V shall not be true and correct or if Buyer has failed to perform any covenant or agreement on the part of Buyer set forth in this Agreement (including an obligation to consummate the Closing) such that the conditions to Closing set forth in either Section 7.2(a) or Section 7.2(b) would not be satisfied and the breach or breaches causing such representations or warranties not to be true and correct, or the failures to perform any covenant or agreement, as applicable, are not cured on or prior to the earlier of (i) ten (10) days after written notice thereof is delivered to Buyer and (ii) the Outside Date; provided that this provision shall not be available to the Sellers if any Seller is then in breach of this Agreement; and

(f) By Buyer, upon written notice to the Sellers, if since the Agreement Date the Company has experienced a Company Material Adverse Effect.

(g) By the Sellers, upon written notice to Buyer, if since the Agreement Date Buyer has experienced a Buyer Material Adverse Effect.

8.2 Effect of Termination. In the event this Agreement is terminated pursuant to Section 8.1, this Agreement shall become null and void (other than the provisions of this Article VIII, Section 6.4 (Public Announcement), Section 6.6 (Confidentiality), Section 10.14 (Governing Law) and Section 10.15 (Exclusive Jurisdiction; Venue; Service of Process)) and any provision hereof that forms the basis for a claim of breach of this Agreement prior to the termination of this Agreement, all of which shall survive termination of this Agreement and remain in full force and effect, without further liability on the part of the Parties or any of their respective directors, officers or Affiliates, except that nothing shall relieve any Party from liability related to claims sounding in contract, tort or otherwise related to a breach of this Agreement prior to the termination of this Agreement.

ARTICLE IX

SURVIVAL AND INDEMNIFICATION

9.1 Survival. All representations and warranties of the Parties contained in this Agreement or in any certificate delivered hereunder, and all rights and remedies with respect to such representations and warranties, shall survive the Closing until the date that is twelve (12) months after the Closing Date (the “General Survival Date”); provided, however, that, (i) the Fundamental Representations shall survive until the later of six (6) years after the Closing Date and ninety (90) days after the expiration of the applicable statute of limitations and (ii) all of the covenants, agreements and obligations of the Parties contained in this Agreement or any other document, certificate, schedule or instrument delivered or executed in connection herewith that are intended to survive the Closing shall survive the Closing and continue in full force and effect until fully performed (the General Survival Date or the last day of any of the periods specified in clauses (i) and (ii) of this Section 9.1, each alternatively referred to herein as the “Survival Date”).
Notwithstanding the foregoing, if a claim or notice with respect to recovery under the indemnification provisions hereof is given in accordance with the terms hereof prior to the applicable Survival Date, the claim and any representations and warranties or covenants underlying such claim, shall continue until such claim is finally resolved pursuant to the terms of this Article IX. It is the express intent of the Parties that, if an applicable survival period as contemplated by this Section 9.1 is shorter than the statute of limitations that would otherwise apply, then, by contract, the applicable statute of limitations shall be reduced to the survival period contemplated hereby. The Parties further acknowledge that the time periods set forth in this Section 9.1 for the assertion of claims under this Agreement are the result of arms'-length negotiation among the Parties and that they intend for the time period to be enforced as agreed by the Parties. Notwithstanding anything in this Agreement to the contrary, claims for Intentional Fraud shall survive indefinitely.

9.2 Indemnification.

(a) Indemnification by Sellers and Buyer.

(i) Subject to the terms, conditions and limitations of this Article IX, from and after the Agreement Date, each Seller, severally and not jointly (which, with respect to any Losses in excess of the Indemnification Hold-Back Shares or otherwise subject to the Offset Right, shall represent such Seller’s pro rata share thereof based on the proportion of the Total Purchase Price received by such Seller), shall indemnify and hold harmless each Buyer Indemnified Person from and against any Loss which such Buyer Indemnified Person may suffer, sustain or become subject to, as a result of or based upon or arising out of (and whether or not involving a Third Party Claim):

(A) any breach of any of the representations or warranties (other than the Seller Fundamental Representations) made by the Sellers in this Agreement or made by the Sellers in any certificate delivered by or on behalf of the Sellers pursuant hereto;

(B) any breach of any covenant or agreement of the Sellers provided for in this Agreement with respect to covenants required to be performed prior to the Closing;

(C) any errors or omission in the calculations delivered to Buyer pursuant to Section 2.5;

(D) any inaccuracy in the Allocation Schedule;

(E) any breach of any covenant or agreement of the Sellers’ Representative;

(F) any breach of any of the Seller Fundamental Representations;

(A) any (1) Taxes of the Company for any Pre-Closing Tax Period (taking into account estimated payments of, and any other amounts creditable against, such Taxes), but only to the extent such Taxes (x) were not included in the computation of the Closing Net
Working Capital as finally determined and (y) do not result from any action of Buyer on the Closing Date following the Closing, and (2) obligations of the Sellers or Sellers’ Representative under Section 6.8 above; and

(B) any (1) Taxes of any of the Sellers or any of their Affiliates for any taxable period (or portion thereof), (2) all Taxes of or imposed on the Company or for which the Company is liable by reason of having been a member of any affiliated group of corporations or pursuant to Treasury Regulation Section 1.1502-6 or any similar provision of any applicable Law, (3) all Taxes of any Person imposed on or required to be paid by the Company as transferee, successor in interest, by contract or otherwise, which Taxes relate to an event or transaction occurring prior to Closing, and (4) any imputed underpayment (as defined in Section 6225 of the Code) of or with respect to (or imposed on) the Company with respect to any period (or portion thereof) ending on or prior to the Closing Date, but only to the extent that such imputed underpayment does not result from any action of Buyer on the Closing Date following Closing.

(ii) Subject to the terms, conditions and limitations of this Article IX, Buyer shall indemnify and hold harmless each Seller Indemnified Person from and against any Loss which such Seller Indemnified Person may suffer, sustain or become subject to, as a result of or based upon or arising out of (and whether or not involving a Third Party Claim):

(A) any breach of the representations or warranties made by Buyer in this Agreement; and

(B) any breach of any covenant or agreement of Buyer provided for in this Agreement.

(b) Limitations on Claims. Notwithstanding the foregoing:

(i) With respect to any claim seeking recovery of any Loss under Section 9.2(a)(i)(A) above (i.e., any breach of any of the representations or warranties (other than the Seller Fundamental Representations) made by the Sellers in this Agreement or made by the Sellers in any certificate delivered by or on behalf of the Sellers pursuant hereto), other than with respect to any claims arising from any Intentional Fraud:

(A) No Seller will have any liability for any such Loss until the aggregate amount of all such Losses exceeds an amount equal to $100,000 (the “Deductible”) (in which case the Buyer Indemnified Persons shall only be entitled to indemnification for Losses in excess of the Deductible); and

(B) The Sellers will not have any Liability for any such Loss except pursuant to the Offset Right.

(ii) No Buyer Indemnified Person shall be entitled to recover any Losses under this Article IX to the extent the amount of such Losses has actually been recovered by such Buyer Indemnified Person from a Person other than another Party to this Agreement, and each Buyer Indemnified Person shall, to the extent applicable, use commercially reasonable efforts to seek
indemnification or other redress pursuant to the terms of any Contract to which the Company or Buyer is a party and by which such Person has the right to seek indemnification from any third party.

(iii) The Buyer Indemnified Persons shall not be entitled to indemnification with respect to any Losses as a result of or based upon or arising from any claim or Liability to the extent such claim or Liability is taken into account in determining the amount of any adjustment to the Upfront Purchase Price in accordance with Section 2.7.

(iv) If any Indemnifying Party makes any indemnification payment pursuant to this Article IX or otherwise by reason of the transactions contemplated hereby under any theory of recovery, such Indemnifying Party shall be subrogated, to the extent of such payment and to the extent permitted by applicable Law, to any rights and remedies of the Indemnified Person to recoup such amounts from third parties with respect to the matters giving rise to indemnification hereunder. Notwithstanding anything in this Agreement to the contrary, however, no Seller shall be subrogated to any rights or remedies, or otherwise make any claim against the Company or any other Buyer Indemnified Person (regardless of the facts or the kind of Loss at issue), and each Seller expressly waives any right of subrogation, contribution, advancement, indemnification or other claim against the Company or any other Buyer Indemnified Person with respect to any indemnification obligation or any other liability to which such Seller may become subject under or in connection with this Agreement.

(v) The aggregate amount of all Losses for which a Seller shall be liable pursuant to this Agreement shall be (i) the amount of the Total Purchase Price actually received by such Seller (with shares of Buyer Common Stock deemed, for this purpose, to have a value (x) for the Upfront Stock Consideration Shares and the Indemnification Hold-Back Shares equal to the Trailing Average Share Price calculated as of the Agreement Date and (y) for any shares of Buyer’s Common Stock issued upon an Earnout Date the Trailing Average Share Price calculated as of such Earnout Date) and (ii) subject to the preceding clause (i), with respect to any Losses in excess of the Indemnification Hold-Back Shares or otherwise subject to the Offset Right, such Seller’s pro rata share thereof based on the proportion of the Total Purchase Price received by such Seller; provided, however, that such limit shall not apply to any Seller in the instance of any Intentional Fraud of such Seller or any Person affiliated with such Seller who has served as an officer, director, employee or consultant of the Company.

(c) Calculation of Losses. For the purpose of calculating the amount of Losses pursuant to this Article IX (but not for determining the existence of a breach of any representation or warranty), the representations and warranties of the Sellers in this Agreement that are qualified by materiality, Company Material Adverse Effect or a similar qualification shall be deemed to be made without such materiality, Company Material Adverse Effect or similar qualifiers; provided, however, that this Section 9.2(c) shall not apply to the term “Material Contract.”

9.3 Offset Right.

(a) Offset Right. Without limiting any other remedies of the Buyer Indemnified Persons, from and after the Closing Date, and subject to the limitations set forth in this Article IX,
(b) **Exercise of Offset Right.** To exercise the Offset Right, Buyer shall (on behalf of Buyer or any other Buyer Indemnified Persons at issue), prior to the Indemnification Hold-Back Payment Date (in order to exercise the Offset Right with respect to the Indemnification Hold-Back Amount) or, as to any shares of Buyer’s Common Stock or cash at issue, the date on which such shares of Buyer’s Common Stock become issuable or such cash becomes payable pursuant to Section 2.1(b)(v) (in order to exercise the Offset Right with respect to any Earnout Shares issuable), deliver to Sellers’ Representative at the notice address set forth in Section 10.2 (as the same may be amended from time to time as provided therein and including all Persons to be copied on any notice to Sellers’ Representative), a certificate signed by Buyer (an “Offset Certificate”): (i) stating in good faith that one or more of the Buyer Indemnified Persons has suffered, sustained or become subject to Losses which are entitled to be recovered pursuant to the Offset Right (the “Stated Damages”); and (ii) specifying to the extent practicable in reasonable detail the individual items of Stated Damages and the nature of the breach or other circumstance to which each such item is related. Upon the timely delivery of an Offset Certificate stating a bona fide claim for Stated Damages, any distribution of the Indemnification Hold-Back Amount and, as applicable, any issuance of shares of Buyer’s Common Stock pursuant to Section 2.1(b)(v), shall be stayed to the extent of the Stated Damages.

(c) **Perfection of Offset Right.** After the expiration of a period of thirty (30) days following the time of delivery of an Offset Certificate to Sellers’ Representative, the Offset Right shall be deemed perfected as to the applicable Stated Damages and the Indemnification Hold-Back Amount and, as applicable, the Earnout Shares issuable pursuant to Section 2.1(b)(v), shall be reduced by an equal amount unless, prior to the expiration of such thirty (30) day period, Sellers’ Representative objects in a written statement delivered to Buyer to the claims made in the Offset Certificate, setting forth in reasonable detail the objections to the claim for Stated Damages.

(d) **Objection to Offset Right.** If Sellers’ Representative shall timely object in writing to an exercise of the Offset Right by Buyer, Sellers’ Representative and Buyer shall attempt in good faith to agree upon the rights of the respective Parties with respect to each of such claims within thirty (30) days after such objection. If Sellers’ Representative and Buyer should so agree on a claim, a memorandum setting forth such agreement shall be prepared and signed by such Parties, which shall include a statement of the amount of resulting reduction in the Indemnification Hold-Back Amount and, as applicable, the Earnout Shares issuable pursuant to Section 2.1(b)(v).

(e) **Settlement of Offset Right.** If no agreement can be reached after good faith negotiation between Sellers’ Representative and Buyer pursuant to Section 9.3(d), either Buyer or Sellers’ Representative may initiate an Action with the state or federal courts located in the City and County of San Francisco, California to resolve such dispute. The decision of any such court
as to the validity and amount of any claim in such Offset Certificate shall be binding and conclusive upon the Parties.

9.4 Claims for Indemnification; Resolution of Conflicts.

(a) Third-Party Claims.

(i) In the event that any Action is instituted, or that any Third Party Claim is asserted, the Indemnified Person seeking indemnification for any related Loss (including a Buyer Indemnified Person seeking indemnification for any related loss through an Offset Right) shall notify the Indemnifying Party of any such Action or claim promptly after receiving notice thereof (each, a “Third Party Indemnification Claim Notice”); provided, however, that no delay on the part of the Indemnified Person in giving any such notice shall relieve an Indemnifying Party of any indemnification obligations unless, and only to the extent that, such Indemnifying Party is actually and materially prejudiced by such delay and then only to the extent of such prejudice. Subject to the provisions of this Section 9.4(a)(i), and assuming the Indemnified Person does not have the right to elect or does not choose to elect in its Third Party Indemnification Claim Notice to assume the defense of the Third Party Claim in accordance with Section 9.4(a)(v), the Indemnifying Party shall be entitled at its own expense to conduct and control the defense and settlement of such Third Party Claim on behalf of the Indemnified Person through counsel chosen by the Indemnifying Party and reasonably acceptable to the Indemnified Person if the Indemnifying Party notifies the Indemnified Person in writing within thirty (30) days (or sooner, if the nature of the Third Party Claim so requires) of its intent to do so and confirms that the Indemnifying Party shall be obligated to indemnify the Indemnified Person against all resulting Losses in accordance with (and subject to the limitations of) this Agreement. If the Indemnifying Party does not elect within thirty (30) days (or sooner, if the nature of the Third Party Claim so requires) to defend against, negotiate, settle or otherwise deal with any Third Party Claim, the Indemnified Person may defend against, negotiate, settle or otherwise deal with such Third Party Claim with one counsel (and any appropriate local counsel as reasonably required) reasonably acceptable to the Indemnifying Party at the expense of the Indemnifying Party; provided, that if the Indemnifying Party does not object to the Indemnified Party’s choice of counsel within ten (10) Business Days after receipt of notice from the Indemnified Party of such choice of counsel, such counsel chosen by the Indemnified Party will be deemed reasonably acceptable to the Indemnifying Party.

(ii) If the Indemnifying Party elects to defend against, negotiate, settle or otherwise deal with any Third Party Claim:

(A) the Indemnifying Party shall use its commercially reasonable efforts to defend such Third Party Claim;

(B) the Indemnified Person, prior to the period in which the Indemnifying Party assumes the defense of such matter, may take such reasonable actions to preserve any and all rights with respect to such matter, without such actions being construed as a waiver of the Indemnified Person’s rights to defense and indemnification pursuant to this Agreement and without such actions being determinative of the amount of any indemnifiable Losses, except to the
extent the Indemnifying Party’s ability to defend such action is actually and materially prejudiced by such actions; and

(C) the Indemnified Person may participate in the defense of such Third Party Claim with separate counsel reasonably acceptable to the Indemnifying Party at its own expense or, if so requested by the Indemnifying Party or, if in the reasonable opinion of counsel to the Indemnified Person, a conflict or potential conflict exists between the Indemnified Person and the Indemnifying Party that would make such separate representation advisable, at the reasonable expense of the Indemnifying Party.

(iii) In connection with this Section 9.4(a), the Parties agree to:

(A) cooperate with each other in connection with the defense, negotiation or settlement of any such Third Party Claim;

(B) make available witnesses in a timely manner to provide testimony through declarations, affidavits, depositions, or at hearing or trial and to work with each other in preparation for such events consistent with deadlines dictated by the particular Third Party Claim;

(C) preserve all documents and things required by litigation hold orders pending with respect to particular Third Party Claims; and

(D) provide such documents and things to each other, consistent with deadlines dictated by a particular matter, as required by legal procedure or court order, or if reasonably requested by another Party hereto;

provided that such cooperation referenced in clauses (A) through (D) shall not be required if it could reasonably be expected to result in a waiver of any attorney-client, work product or other privilege, and provided further that the Parties shall use commercially reasonable efforts to avoid production of confidential information (consistent with Law), and to cause all communications among Employees, counsel and others representing any party to a Third Party Claim to be made so as to preserve any applicable attorney-client or work-product privileges.

(iv) Except as permitted in this Section 9.4(a), the Indemnifying Party shall not, without the written consent of the Indemnified Person(s) (such consent not to be unreasonably conditioned, withheld or delayed), settle or compromise any Third Party Claim or permit a default or consent to entry of any judgment (each a “Settlement”); provided, however, that an Indemnified Person’s written consent shall not be required if (x) the claimant provides such Indemnified Person an unqualified release from all liability in respect of the Third Party Claim, (y) such Settlement does not impose any additional liabilities or obligations on the Indemnified Person and (z) with respect to any non-monetary provision of such Settlement, such provisions could not have, or be reasonably expected to have, any adverse effect on the business, assets, financial condition or results of operations of the Indemnified Person and its Subsidiaries, if any. Any Settlement or compromise that does not comply with the preceding sentence shall not be determinative of the amount of Losses with respect to any related claims for indemnification pursuant
to this Article IX. The costs incurred by Sellers’ Representative pursuant to participating in the defense of any Third Party Claims shall constitute Sellers’ Representative Expenses.

(v) Notwithstanding anything in this Agreement to the contrary, if (v) a Third Party Claim seeks relief other than the payment of monetary damages, (w) the subject matter of a Third Party Claim relates to the ongoing business of the Indemnified Person, which Third Party Claim, if decided against the Indemnified Person, could materially and adversely affect the ongoing business of the Indemnified Person, (x) the claim for indemnification relates to or arises in connection with any criminal proceeding, action or indictment, (y) the Indemnified Person reasonably concludes that the amount of the Third Party Claim and associated defense costs shall exceed the limits on the Indemnifying Party’s obligations under Section 9.2(b), or (z) the Indemnifying Party is unable, upon request from the Indemnified Person, to reasonably demonstrate that it has sufficient financial resources available to defend against the Third Party Claim, then, in each such case, the Indemnified Person alone shall be entitled to contest, defend and settle such Third Party Claim. If the Indemnified Person elects to exercise such right to contest, defend and settle such Third Party Claim, then the Indemnified Person shall notify the Indemnifying Party of such election within thirty (30) days of the later of (A) receiving the applicable Third Party Indemnification Claim Notice or (B) the occurrence of the event giving rise to the Indemnified Person’s right to make such election pursuant to clause (w), (x), (y) or (z) of this Section 9.4(a)(v). In such event, the Indemnified Person shall instead have the right to be represented by counsel of its choice (of which it shall notify the Indemnifying Party) at the Indemnifying Party’s reasonable expense and to defend against, negotiate, settle or otherwise deal with any Third Party Claim; provided that the Indemnified Person may not enter into a Settlement or compromise without the Indemnifying Party’s prior written consent. If the Indemnified Person elects to defend against, negotiate, settle or otherwise deal with any Third Party Claim, then (1) the Indemnified Person shall use its commercially reasonable efforts to defend such Third Party Claim, conduct such defense in a good faith and reasonably diligent manner, keep the Indemnifying Party reasonably informed of the status of such defense, and use commercially reasonable efforts to cooperate with the Indemnifying Party with respect to such defense during the course of such defense, and (2) the Indemnifying Party may participate, at its own expense, in the defense of such Third Party Claim. If the Indemnified Person does not elect to contest, defend and settle such Third Party Claim, then the Indemnifying Party shall then have the right to contest and defend such Third Party Claim as described above in Section 9.4(a)(i).

(vi) Notwithstanding the foregoing, any Third Party Claims in respect of Taxes shall be governed by Section 6.8(c) rather than this Section 9.4(a). To the extent that the provisions of this Section 9.4(a) conflict with the provisions of Section 6.8(c), Section 6.8(c) shall control.

(b) Notification of Other Indemnification Claims. In order for a Buyer Indemnified Person to be entitled to any indemnification for claims other than as contemplated or covered by the Offset Right (although, for the avoidance of doubt, a claim tendered pursuant to the Offset Right shall suffice for all purposes even if not covered, or fully covered, by the Offset Right), such Buyer Indemnified Person shall, promptly upon the discovery of the matter giving rise to any Losses, notify Sellers’ Representative in writing of such Losses specifying in reasonable detail the nature of such Losses and the amounts of liability estimated to accrue therefrom (a “Non-Offset
Notice”). The failure to so notify Sellers’ Representative shall not relieve any Seller from any liability that such Seller may have to Buyer, except to the extent that any such Seller is materially prejudiced as a result of such failure. Thereafter, Buyer shall keep Sellers’ Representative reasonably updated with respect to the status of the Losses at issue and the defense thereof. Sellers’ Representative may object to a claim for indemnification set forth in a Non-Offset Notice by delivering a notice to the Buyer Indemnified Person seeking indemnification within thirty (30) days of the delivery of the Non-Offset Notice, setting forth in reasonable detail the objections to the claim. If Sellers’ Representative either notifies the applicable Indemnified Person that it does not object or does not object in writing by the end of such thirty (30)-day period, such failure to so object shall be an irrevocable acknowledgment that the Buyer Indemnified Person is entitled to the full amount of the claims set forth in such Non-Offset Notice, and Sellers’ Representative (as well as the Sellers) shall take all necessary actions under this Agreement to effect payment in respect thereof. If Sellers’ Representative shall timely object in writing to a Non-Offset Notice, Sellers’ Representative and Buyer shall attempt in good faith to agree upon the rights of the respective Parties with respect to such claim within thirty (30) days after such objection. If Sellers’ Representative and Buyer should so agree on a claim, a memorandum setting forth such agreement shall be prepared and signed by Sellers’ Representative and Buyer. If no agreement can be reached after good faith negotiation between Sellers’ Representative and Buyer, either Buyer (or any Buyer Indemnified Person) or Sellers’ Representative may initiate an Action with the state or federal courts located in the City and County of San Francisco, California to resolve such dispute. The decision of any such court as to the validity and amount of any claim in such Non-Offset Notice shall be binding and conclusive upon the Parties.

(c) Claims Unaffected by Investigation. Notwithstanding any provision herein to the contrary: (i) the right of an Indemnified Person to indemnification or to assert or recover on any claim hereunder shall not be affected by any investigation conducted with respect to, or any knowledge acquired or capable of being acquired, at any time, whether before or after the execution and delivery of this Agreement or the Closing, with respect to the accuracy of or compliance with any of the representations, warranties, covenants, or agreements set forth in this Agreement; and (ii) the waiver of any condition based on the accuracy of any representation or warranty, or on the performance of or compliance with any covenant or agreement, shall not affect the right to indemnification or other remedy based on such representation, warranty, covenant or agreement.

(d) Company. The Parties acknowledge and agree that if the Company suffers, incurs or otherwise becomes subject to any Losses as a result of or in connection with any misrepresentation or inaccuracy in or breach of any representation, warranty, covenant or agreement, then (without limiting any of the rights of the Company as an Indemnified Person) Buyer shall also be deemed, by virtue of its ownership of Company Units, to have incurred Losses as a result of and in connection with such misrepresentation, inaccuracy or breach.

(e) Exclusive Remedy. Subject to Section 10.9 and Section 6.8, and except with respect to (i) Intentional Fraud, (ii) as otherwise set forth in this Agreement (including the provisions of Section 2.7) and (iii) the post-closing covenants of the Sellers (including pursuant to Section 6.9), the Parties acknowledge and agree that the remedies provided for in this Article IX shall be the Parties’ sole and exclusive remedy with respect to any and all claims for any breach, inaccuracy,
misrepresentation or nonperformance, as applicable, of any representation, warranty, covenant, agreement or obligation set forth herein or otherwise relating to the subject matter of this Agreement.

(f) **Indemnification Adjusts Merger Consideration for Tax Purposes.** Each Party shall, including retroactively, treat indemnification payments under this Agreement as well as exercises of the Offset Right as adjustments to the consideration paid in the Transactions for Tax purposes to the extent permitted under applicable Law.

(g) **No Subrogation.** By virtue of executing this Agreement, each Seller (on behalf of itself and each Person affiliated with such Seller who has served as an officer, director, employee or consultant of the Company) agrees not to make any claim for indemnification against any Buyer Indemnified Person based on the fact that such Seller (or any Person affiliated with such Seller who has served as an officer, director, employee or consultant of the Company) was a controlling person, director, Employee or agent of the Company (whether such claim is for Losses of any kind or otherwise and whether such claim is pursuant to Law, a Charter Document, a Contract or otherwise) with respect to any claim brought by a Buyer Indemnified Person against any Seller (or any Person affiliated with such Seller who has served as an officer, director, employee or consultant of the Company) under or relating to this Agreement or the Transactions. With respect to any claim brought by a Buyer Indemnified Person against any Seller (or any Person affiliated with such Seller who has served as an officer, director, employee or consultant of the Company) under or relating to this Agreement or the Transactions, each Seller (on behalf of itself and each Person affiliated with such Seller who has served as an officer, director, employee or consultant of the Company) expressly waives any right of subrogation, contribution, advancement, indemnification or other claim against the Company with respect to any indemnification obligation or any other liability to which such Seller (or any Person affiliated with such Seller who has served as an officer, director, employee or consultant of the Company) may become subject under or in connection with this Agreement.

(h) **Specific Element of Consideration.** The indemnification obligations of the Seller in this Article IX are, without limitation, (i) a specific element of the consideration that induced Buyer to enter into this Agreement and to perform its obligations as contemplated hereby and (ii) intended to be fully enforceable on the terms provided in this Article IX.

9.5 **Sellers’ Representative.**

(a) **Appointment.** By virtue of executing this Agreement, each Seller hereby irrevocably nominates, constitutes and appoints Chris Howlett as the “Sellers’ Representative” hereunder with full power of substitution, to act in the name, place and stead of the Sellers for purposes of executing any documents and taking any actions that Sellers’ Representative may, in its sole discretion, determine to be necessary, desirable or appropriate in connection with any claim for indemnification, compensation or reimbursement under this Article IX. Chris Howlett hereby accepts his appointment as Sellers’ Representative.

(b) **Authority.** The Sellers grant to Sellers’ Representative full authority to execute, deliver, acknowledge, certify and file on behalf of each such Seller (in the name of any or all of the Sellers or otherwise) any and all documents that Sellers’ Representative may, in its sole
discretion, determine to be necessary, desirable or appropriate, in such forms and containing such provisions as Sellers’ Representative may, in its sole discretion, determine to be appropriate, in performing its duties as contemplated by this Section 9.5(b). Notwithstanding anything in this Agreement to the contrary: (i) each Indemnified Person shall be entitled to deal exclusively with Sellers’ Representative on all matters relating to any claim for indemnification, compensation, reimbursement or set off (including Offset Rights) pursuant to Article IX; and (ii) the Buyer, each Buyer Indemnified Person, and each Seller shall be entitled to rely conclusively (without further evidence of any kind whatsoever) on any document executed or purported to be executed on behalf of any Seller by Sellers’ Representative and on any other action taken or purported to be taken on behalf of any Seller by Sellers’ Representative as fully binding upon such Seller. A decision, act, consent or instruction of Sellers’ Representative, including an amendment, extension or waiver of this Agreement (or any provision hereof) pursuant to Section 10.4 or Section 10.5 shall constitute a decision of the Sellers and shall be final, binding and conclusive upon the Sellers. Buyer and the Company may rely upon any such decision, act, consent or instruction of Sellers’ Representative as being the decision, act, consent or instruction of the Sellers. Buyer and the Company are hereby relieved from any liability to any Person for any acts done by them in accordance with such decision, act, consent or instruction of Sellers’ Representative.

(c) **Power of Attorney.** The Sellers recognize and intend that the power of attorney granted to Sellers’ Representative: (i) is coupled with an interest and is irrevocable; (ii) may be delegated by Sellers’ Representative; and (iii) shall survive the death, dissolution or incapacity, as applicable, of each of the Sellers.

(d) **Replacement.** If Sellers’ Representative is dissolved, resigns or is otherwise unable to fulfill its responsibilities hereunder, the Sellers shall (by consent of those Persons entitled, or who were entitled, to at least a majority of the Indemnification Hold-Back Amount), within ten (10) days after such dissolution, resignation or inability, appoint a successor to Sellers’ Representative reasonably satisfactory to Buyer. Any such successor shall succeed Sellers’ Representative as Sellers’ Representative hereunder. If for any reason there is no Sellers’ Representative at any time, all references herein to Sellers’ Representative shall be deemed to refer to the Sellers who may take action by the written consent of Persons entitled to at least a majority of any further distributions hereunder.

(e) **Indemnification; Sellers’ Representative Expenses.** Sellers’ Representative shall not be liable to the Sellers for any action taken or omitted to be taken by it as Sellers’ Representative except in the case of willful misconduct or gross negligence. The Sellers shall severally, but not jointly, indemnify Sellers’ Representative and hold Sellers’ Representative harmless from and against all Sellers’ Representative Expenses.

(f) **Expense Fund.** The Expense Fund Amount shall be used by the Sellers’ Representative as the first recourse to offset any expenses incurred by the Sellers’ Representative in connection with the performance of its duties under this Agreement. Any unused portion of the Expense Fund Amount remaining on the two-year anniversary of the Closing Date shall be distributed to the Sellers in accordance with Section 2.1(b)(iv).

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ARTICLE X

GENERAL PROVISIONS

10.1 Interpretation. The following rules shall apply to the interpretation and construction of the terms and provisions of this Agreement:

(a) Provisions.

(i) When a reference is made in this Agreement to an “Article,” “Section,” “Exhibit” or “Schedule,” such reference shall be to an Article or Section of, or an Exhibit or Schedule to, this Agreement unless otherwise indicated.

(ii) The table of contents and headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement.

(iii) Whenever the words “include,” “includes,” or “including” are used in this Agreement, such words shall be deemed to be followed by the words “without limitation.”

(iv) The words “hereof,” “herein,” and “hereunder” and words of similar import when used in this Agreement refer to this Agreement as a whole and not to any particular provision of this Agreement unless otherwise expressly indicated in the accompanying text.

(v) The use of “or” is not intended to be exclusive unless otherwise expressly indicated in the accompanying text.

(vi) The defined terms contained in this Agreement are applicable to the singular as well as the plural forms of such terms. Reference to the masculine gender shall be deemed to also refer to the feminine gender and vice versa.

(vii) A reference to documents, instruments or agreements also refers to all addenda, exhibits or schedules thereto.

(viii) Any reference to a provision or part of a Law shall include a reference to that provision or part as it may be renumbered or amended from time to time and any successor provision or part or any renumbering or amendment thereof unless otherwise indicated herein.

(ix) References to “deliver,” “furnish,” “provided” or “made available” means that such documents or information referenced are contained, as of a date which is at least two (2) Business Days prior to the Agreement Date, in the Company’s “Project Galoa” or “Restricted Access (Galoa)” electronic data room hosted by Davis Wright Tremaine LLP.

(x) When calculating the period of time before which, within which or following which, any act is to be done or step taken pursuant to this Agreement, the date that is the reference date in calculating such period shall be excluded. If the last day of such period is a non-Business Day, the period in question shall end on the next succeeding Business Day.
(b) **No Presumption.** The Parties have participated jointly in the negotiation and drafting of this Agreement and, in the event any ambiguity or question of intent or interpretation arises, this Agreement shall be construed as jointly drafted by the Parties and no presumption or burden of proof shall be used to favor or disfavor any Party by virtue of the authorship of any provision of this Agreement.

10.2 **Notices.** All notices, waivers, consents and other communications to any Party hereunder shall be in writing and shall be deemed given (i) when personally delivered, (ii) when receipt is electronically confirmed, if sent by email of a .pdf document, (iii) one (1) Business Day after deposit with a nationally recognized overnight courier, specifying next day delivery, with proof of receipt or (iv) three (3) Business Days after being sent by registered or certified mail, return receipt requested and postage prepaid, in each case to the Parties at the address, or if applicable or email address following such Party’s name below or such other address or email address as such Party may subsequently designate to the other Parties by notice in accordance with this Section 10.2:

If to Buyer, to:

Invitae Corporation  
1400 16th Street  
San Francisco, CA 94103  
Attention: Tom Brida, General Counsel  
Email:

with copies (which shall not constitute notice) to:

Pillsbury Winthrop Shaw Pittman LLP  
12255 El Camino Real, Suite 300  
San Diego, California 92130  
Attention: Mike Hird  
Email: mike.hird@pillsburylaw.com

If to the Sellers (prior to the Closing), to the address set forth for the Sellers on the signature pages hereto.

If to Sellers’ Representative (following the Closing), to:

Chris Howlett  
Email:

with a copy (which shall not constitute notice) to:

Davis Wright Tremaine LLP  
920 Fifth Avenue, Suite 3300  
Seattle, WA 98104  
Attention: David Gee

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10.3 Assignment and Succession. Neither this Agreement nor any of the rights, interests or obligations hereunder may be assigned or delegated by any of the Parties without the written consent of the other Parties, except that (i) Buyer may, without the prior consent of any other Party, collaterally assign this Agreement to any lender or (ii) prior to the Closing, each Seller may, without the prior consent of any other Party, assign all or any portion of its rights under this Agreement to receive the purchase price to an Affiliate of such Seller for estate planning or other similar purposes; provided that no such assignment shall relieve the assigning Party of any of its obligations hereunder. Any assignment of this Agreement or any of the rights, interests or obligations hereunder not permitted under this Section 10.3 shall be null and void ab initio. Subject to the foregoing terms of this Section 10.3, this Agreement shall be binding upon, inure to the benefit of and be enforceable by the Parties and their respective successors and permitted assigns.

10.4 Amendment or Supplement. Subject to the requirements of applicable Law, this Agreement may be amended at any time by execution of an instrument in writing identifying itself as an amendment signed, when amended prior to the Closing, by Buyer and the Sellers and, when amended on or after the Closing, by Buyer and Sellers’ Representative. For purposes of this Section 10.4, the Sellers agree that any amendment of this Agreement consented to by Sellers’ Representative shall be binding on and enforceable against them, whether or not they have signed this Agreement or such amendment.

10.5 Waivers. No waiver of any provision of this Agreement shall be valid and binding unless it is in writing and signed by the Party against whom the waiver is to be effective. No failure on the part of any Party in exercising any right, privilege or remedy hereunder and no delay on the part of any Party in executing any right, privilege or remedy under this Agreement, shall operate as a waiver thereof, nor shall any single or partial exercise of any such right preclude any other or further exercise thereof or the exercise of any other right hereunder. No notice to or demand on a Party made hereunder shall operate as a waiver of any right of the Party giving such notice or making such demand to take further action without notice or demand as permitted hereunder.

10.6 Entire Agreement. This Agreement, including the Schedules and Exhibits hereto and the other documents referred to herein which form a part hereof contain the entire understanding of the Parties with respect to the subject matter contained herein and therein. This Agreement supersedes all prior and contemporaneous, agreements, arrangements, contracts, discussions, negotiations, undertakings and understandings (whether written or oral) between the Parties with respect to such subject matter.

10.7 No Third-Party Beneficiaries. Nothing in this Agreement, express or implied, is intended to or shall confer upon any Person (other than the Parties) any right, benefit or remedy of any nature whatsoever under this Agreement, except that after the Closing, Indemnified Persons shall be third party beneficiaries for purposes of enforcing the rights granted to such Indemnified Persons, and Company Indemnities shall be third party beneficiaries for purposes of enforcing the rights granted to such Company Indemnities in Section 6.15. For the avoidance of doubt, no consent
of any Indemnified Person or Company Indemnity who or which is not a Party shall be necessary to amend any provision of this Agreement.

10.8 Remedies Cumulative. Except as otherwise provided in this Agreement, all rights and remedies of each of the Parties shall be cumulative and the exercise of any one or more rights or remedies shall not preclude the exercise of any other right or remedy available hereunder or under applicable Law.

10.9 Specific Performance. The Parties agree that each of the Parties would be irreparably harmed if any of the provisions of this Agreement are not performed in accordance with their specific terms and that any breach of this Agreement by the other Parties could not be compensated adequately by monetary damages alone. Accordingly, the Parties agree that, in addition to any other remedy to which such Party may be entitled to at Law or in equity, each Party shall be entitled to temporary, preliminary and/or permanent injunctive relief or injunctions to prevent breaches or threatened breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement (including the right to compel the other Parties to cause the Transactions to be consummated on the terms and subject to conditions set forth in this Agreement) without having to prove irreparable harm or that monetary damages would be inadequate. The Parties expressly waive any requirement under any Law that the other Parties obtain any bond or give any other undertaking in connection with any action seeking injunctive relief or specific performance of any of the provisions of this Agreement. Each of the Parties further agrees that in the event of any action for specific performance relating to this Agreement or the Transactions, such Party shall not assert and hereby waives the defense that a remedy at Law would be adequate or that specific performance is not an appropriate remedy for any reason in Law or equity.

10.10 Severability. If a court of competent jurisdiction finds that any term or provision of the Agreement is invalid, illegal or unenforceable under any Law or public policy, the remaining provisions of the Agreement shall remain in full force and effect if the economic and legal substance of this Agreement and the Transactions shall not be affected in any manner materially adverse to any Party. Any such term or provision found to be illegal, invalid or unenforceable only in part or in degree shall remain in full force and effect to the extent not invalid, illegal or unenforceable. Upon the determination that any term or provision is invalid, illegal or unenforceable, the Parties intend that such provision shall be construed by modifying or limiting it so as to be valid and enforceable to the maximum extent possible under applicable Law and compatible with the consummation of the Transactions as originally intended.

10.11 Costs and Expenses. Except as otherwise specified herein, whether or not the Transactions are consummated, each Party shall pay all costs and expenses it has incurred in connection with this Agreement and the Transactions.

10.12 Time of Essence. The Parties acknowledge that the Outside Date specified in Section 8.1(b) is essential and therefore agree that no Party wishing to terminate this Agreement in accordance with Section 8.1(b) shall be required to extend the Outside Date to allow any other Party to satisfy any condition or perform any obligation under this Agreement.
10.13 **Counterparts.** This Agreement may be executed in several counterparts, each of which shall be deemed an original copy of this Agreement and all of which, when taken together, shall constitute one instrument. The exchange of copies of this Agreement and manually executed signature pages by transmission by email of a .pdf of a handwritten original signature or signatures to the other Parties shall constitute effective execution and delivery of this Agreement and may be used in lieu of the original Agreement for all purposes. The signature of a Party transmitted by email or other electronic means shall be deemed to be an original signature for any purpose.

10.14 **Governing Law.** This Agreement and all claims or causes of action (whether sounding in contract or tort) arising under or related to this Agreement, shall be governed by and construed in accordance with, the Laws of the State of California, without regard to any rule or principle that might refer the governance or construction of this Agreement to the Laws of another jurisdiction.

10.15 **Exclusive Jurisdiction; Venue; Service of Process.** In any action or proceeding between any of the Parties arising under or related to this Agreement or the Transactions, each of the Parties (i) knowingly, voluntarily, irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the state or federal courts located in the City and County of San Francisco, California, (ii) agrees that all claims in respect of any such action or proceeding shall be heard and determined exclusively in accordance with clause (i) of this **Section 10.15**, (iii) waives any objection to the laying of venue of any such action or proceeding in such courts, including any objection that any such action or proceeding has been brought in an inconvenient forum or that the court does not have jurisdiction over any Party and (iv) agrees that service of process upon such Party in any such action or proceeding shall be effective if such process is given as a notice in accordance with **Section 10.2**. The Parties agree that any Party may commence a proceeding in a court other than the above-named courts solely for the purpose of enforcing an order or judgment issued by one of the above-named courts.

***

[Signature page follows]

IN WITNESS WHEREOF, the Parties hereto, intending to be legally bound hereby, have caused this Unit Purchase Agreement to be duly executed under seal and delivered as of the date first above written.

THE SELLERS:

/s/ David N. Colaizzi

David N. Colaizzi

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THE SELLERS’ REPRESENTATIVE (solely with respect to the provisions expressly applicable to the Sellers’ Representative as set forth in the Unit Purchase Agreement):

/s/ Chris Howlett

Chris Howlett

/s/ Anthony Muhlenkamp

Anthony Muhlenkamp

/s/ Gerald Schneider

Gerald Schneider

/s/ Matt Lehrian

Matt Lehrian

[Signature Page to Unit Purchase Agreement]
IN WITNESS WHEREOF, the Parties hereto, intending to be legally bound hereby, have caused this Unit Purchase Agreement to be duly executed under seal and delivered as of the date first above written.

BUYER: INVITAE CORPORATION

By: /s/ Sean E. George, Ph.D.
Name: Sean E. George, Ph.D.
Title: President and Chief Executive Officer

[Signature Page to Unit Purchase Agreement]
REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this “Agreement”) is made and entered into as of April 1, 2020 (the “Effective Date”) by and among Invitae Corporation, a Delaware corporation (the “Company”), and certain securityholders of YouScript Incorporated, a Delaware corporation ("YouScript") listed on Exhibit A hereto (each such securityholder, as well as any permitted transferee of Registrable Securities (as defined below) hereunder, in each case to the extent holding Registrable Securities, a “Holder” and collectively, the “Holders”).

RECITALS

WHEREAS, the Company, YouScript, Yasawa Merger Sub A Inc., a Delaware corporation and wholly owned subsidiary of the Company (“Merger Sub A”), Yasawa Merger Sub B LLC, a Delaware limited liability company and wholly owned subsidiary of the Company (“Merger Sub B”), and Fortis Advisors LLC, a Delaware limited liability company, as Holders’ Representative (as defined therein), have entered into that certain Agreement and Plan of Merger dated as of March 10, 2020 (the “Merger Agreement”), pursuant to which (i) Merger Sub A will be merged with and into YouScript, and YouScript shall continue as the surviving entity and wholly owned subsidiary of the Company (the “Reverse Merger”) and (ii) promptly thereafter as part of the same overall transaction, and in all cases on the Closing Date (as defined in the Merger Agreement), YouScript will be merged with and into Merger Sub B, and Merger Sub B shall continue as the surviving entity and wholly owned subsidiary of the Company (the “Forward Merger” and, together with the Reverse Merger, the “Mergers”);

WHEREAS, in connection with the Mergers and pursuant to the Merger Agreement, the Company issued to the Holders at the Closing (as defined in the Merger Agreement) shares of the Company’s common stock, par value $0.0001 per share, identified on Exhibit A hereto as Stock Consideration Shares (the “Shares”) pursuant to the Merger Agreement; and

WHEREAS, in connection with the consummation of the transactions contemplated by the Merger Agreement, the Company agreed to grant certain registration rights to the Holders as set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, the parties agree as follows:

ARTICLE I
DEFINITIONS

Section 1.1 Definitions. For purposes of this Agreement, the following terms and variations thereof have the meanings set forth below:
“Affiliate” means, with respect to any person, any other person that, directly or indirectly, controls, or is controlled by, or is under common control with, such person. For this purpose: (a) “control” (including, with its correlative meanings, “controlled by” and “under common control with”) means the possession, directly or indirectly, of the power to direct or cause the direction of management or policies of a Person, whether through the ownership of securities or partnership or other ownership interests, by contract or otherwise; and (b) “person” means any natural person, corporation, limited liability company, partnership, association, trust or other entity.

“Agreement” has the meaning set forth in the preamble.

“Business Day” means any day, other than a Saturday, Sunday or one on which banks are authorized by law to be closed in New York, New York.

“Company Indemnitee” has the meaning set forth in Section 4.1(b).

“Effective Date” has the meaning set forth in the preamble.

“Effectiveness Period” has the meaning set forth in Section 3.1(b).


“Grace Period” has the meaning set forth in Section 3.2(h).

“Holder Indemnitee” has the meaning set forth in Section 4.1(a).

“Inmennified Party” has the meaning set forth in Section 4.1(c).

“Inmennifying Party” has the meaning set forth in Section 4.1(c).

“Merger Agreement” has the meaning set forth in the recitals.

“Registrable Securities” means the Shares issued to the Holders pursuant to the Merger Agreement and any securities issued or issuable upon any stock split, dividend or other distribution, recapitalization or similar event with respect to such securities; provided, however, that Registrable Securities shall cease to be Registrable Securities with respect to a particular Holder when (i) such securities have been disposed of in accordance with the Registration Statement or pursuant to Rule 144; (ii) such securities may be sold pursuant to Rule 144 without any manner-of-sale restrictions or volume limitations; or (iii) such securities cease to be outstanding.

“Registration Expenses” means all expenses incurred by the Company in effecting the registration pursuant to this Agreement, including all registration and filing fees, printing expenses, fees and disbursements of counsel for the Company, “blue sky” fees and expenses, and expenses of the Company’s independent registered public accounting firm in connection with any regular or special reviews or audits incident to or required by any such registration, but shall not include Selling Expenses.
“Registration Statement” has the meaning set forth in Section 3.1.

“Rule 144” means Rule 144 under the Securities Act or any successor or other similar rule, regulation or interpretation of the SEC that may at any time permit the sale of Registrable Securities to the public without registration.

“Rule 405” means Rule 405 under the Securities Act or any successor or other similar rule.

“Rule 415” means Rule 415 under the Securities Act or any successor or other similar rule providing for offering securities on a continuous or delayed basis.

“Rule 424” means Rule 424 under the Securities Act or any successor or other similar rule.

“Shares” has the meaning set forth in the recitals.

“SEC” means the Securities and Exchange Commission.

“Securities Act” means the Securities Act of 1933.

“Selling Expenses” means all discounts, selling commissions, fees of selling brokers, dealer managers and similar securities industry professionals and stock transfer taxes applicable to the sale of Registrable Securities and fees and disbursements of counsel for any Holder (other than the fees and disbursements of counsel for the Company included in Registration Expenses).

“Transfer” means, directly or indirectly, to sell, transfer, assign, pledge, encumber, hypothecate or similarly dispose of (by merger, testamentary disposition, operation of law or otherwise), either voluntarily or involuntarily, or to enter into any contract, option or other arrangement or understanding with respect to the sale, transfer, assignment, pledge, encumbrance, hypothecation or similar disposition of (by merger, testamentary disposition, operation of law or otherwise) any Shares.

“Violation” has the meaning set forth in Section 4.1(a).

ARTICLE II
TRANSFER RESTRICTIONS

Section 2.1 General Transfer Restrictions. The right of any Holder to Transfer any Shares held by it is subject to the restrictions set forth below.

(a) Each Holder acknowledges that the Shares have not been registered under the Securities Act and may not be Transferred except pursuant to an effective registration statement
under the Securities Act or pursuant to an exemption from registration under the Securities Act. Each Holder covenants that the Shares will only be disposed of pursuant to an effective registration statement under, and in compliance with the requirements of, the Securities Act or pursuant to an available exemption from the registration requirements of the Securities Act, and in compliance with any applicable state and foreign securities laws. In connection with any Transfer of the Shares other than a Transfer (i) pursuant to an effective registration statement, (ii) to the Company, (iii) pursuant to Rule 144, or (iv) if Holder is a venture capital or private equity fund, a customary distribution to its partners or members for no consideration, the Company may require the Holder to provide to the Company an opinion of counsel selected by the Holder and reasonably acceptable to the Company, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such Transfer does not require registration under the Securities Act; provided, however, that prior to any transfer pursuant to (iv), each transferee shall agree with the Company in writing to be bound by this Agreement (it being understood that the rights of the transferor under this Agreement shall likewise be deemed assigned to such transferee upon such transfer).

(b) Each Holder agrees to the affixing, so long as is required by this Section 2.1, of the following legend on any certificate or book-entry position evidencing any of the Shares:

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “ACT”), OR ANY STATE SECURITIES LAWS AND MAY NOT BE TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN EXEMPTION THEREFROM UNDER THE ACT AND THE RULES AND REGULATIONS THEREUNDER AND APPLICABLE STATE SECURITIES LAWS.

Certificates or book-entry positions evidencing the Shares shall not be required to contain such legend or any other legend (i) following any sale of such Shares pursuant to an effective registration statement (including the Registration Statement described in Section 3.1) covering the resale of the Shares, (ii) following any sale of such Shares pursuant to Rule 144 or if the Shares are transferrable by a person who is not an Affiliate of the Company or the applicable Holder pursuant to Rule 144 without any volume or manner of sale restrictions thereunder, (iii) if Holder is not an Affiliate of the Company, six (6) months following the Closing, provided, however, that in the case of (i), (ii) and (iii), above, the Holder provides the Company with customary legal representation letters reasonably acceptable to the Company or (iv) if the Holder provides the Company with a legal opinion reasonably acceptable to the Company to the effect that the legend is not required under applicable requirements of the Securities Act. Whenever such restrictions shall cease and terminate as to any Shares, (x) the Holder of such securities shall be entitled to receive from the Company upon a written request in writing, without expense, new securities of like tenor not bearing the legend set forth herein, and (ii) the Company or its counsel shall, at the Company’s expense, provide any opinion that may be required by the Company’s transfer agent in connection with the removal of such legend.

(c) Notwithstanding anything herein to the contrary, following registration of the Shares, each Holder agrees not to sell any Shares issued to such Holder if the sales of such shares would, when combined with the sale of any other Shares by such Holder in any one (1) day
period, exceed five percent (5%) of the average daily trading volume of the Company’s common stock on the New York Stock Exchange over the five (5) trading days immediately preceding such date of sale; provided, however, that if the aggregate number of Shares represents less than fifty percent (50%) of the average daily trading volume of the Company’s common stock on the New York Stock Exchange over the five (5) trading days preceding the Closing Date (as defined in the Merger Agreement) (the “Average Volume”), such resale volume limitations shall not apply. If the aggregate number of Shares issued to a Holder represents more than the Average Volume, the Company may place such legends or stock transfer restrictions on the Shares as shall be appropriate for enforcing the provisions of this Section 2(c).

ARTICLE III
REGISTRATION AND PROCEDURES

Section 3.1 S-3 Registration.

(a) In compliance with the terms of this Agreement, the Company shall prepare and file with the SEC a registration statement on Form S-3ASR (or such other form that the Company is then eligible to use if not eligible to use Form S-3ASR) covering the resale as a secondary offering to be made on a continuous basis pursuant to Rule 415 of all Registrable Securities. The registration statement (or new registration statement) required to be filed pursuant to this Section 3.1, together with any amendments and supplements to such registration statement, including post-effective amendments, and all exhibits and all materials incorporated by reference in such registration statement other than a registration statement on Form S-4 or S-8, is referred to herein as the “Registration Statement.”

(b) The Company shall exercise commercially reasonable efforts to prepare and file the Registration Statement with the SEC no later than fifteen (15) Business Days after the Closing Date; provided, however, that no filing of such Registration Statement shall be required during any period in which the Company’s insider trading policy would prohibit executive officers of the Company from trading in the Company’s securities. Subject to the terms of this Agreement, the Company shall use commercially reasonable efforts to have the Registration Statement declared effective as soon as practicable after such filing if not otherwise effective upon filing and to keep the Registration Statement continuously effective and in compliance with the Securities Act and usable for resale of Registrable Securities covered thereby from the date of its initial effectiveness until such time as no Registrable Securities remain outstanding (including as a result of the proviso set forth in the definition of Registrable Securities) (such period, the “Effectiveness Period”).

(c) It shall be a condition precedent to the obligations of the Company to take any action pursuant to Section 3.1 or Section 3.2 with respect to Registrable Securities of a Holder that the Holder shall furnish to the Company such information regarding such Holder as required under Section 3.4(a).
Section 3.2 Registration Procedures; Company Obligations. The Company shall use commercially reasonable efforts to effect the registration of the Registrable Securities in accordance with Section 3.1, and in connection therewith shall have the following obligations:

(a) No later than the first Business Day after the Registration Statement becomes effective, the Company shall file with the SEC the final prospectus included therein pursuant to Rule 424. The Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, shall comply as to form and content with the applicable requirements of the Securities Act and shall not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made (in the case of any prospectus), not misleading.

(b) Subject to Section 3.2(h), the Company shall prepare and file with the SEC such amendments and supplements to the Registration Statement and the prospectus used in connection with the Registration Statement as may be necessary to keep the Registration Statement effective and usable for resale of the Registrable Securities covered thereby at all times during the Effectiveness Period. The Company shall use commercially reasonable efforts to cause any post-effective amendment to the Registration Statement that is not effective upon filing to become effective as soon as practicable after such filing. No later than the first Business Day after a post-effective amendment to the Registration Statement becomes effective, the Company shall file with the SEC the final prospectus or prospectus supplement included therein pursuant to Rule 424.

(c) The Company shall as promptly as practicable notify the Holders of the time when the Registration Statement becomes effective or an amendment or supplement to any prospectus forming a part of such Registration Statement has been filed. The Company shall furnish to the Holders, without charge, such documents, including copies of any preliminary prospectus or final prospectus contained in the Registration Statement or any amendments or supplements thereto, as such Holder may reasonably request from time to time in order to facilitate the disposition of the Registrable Securities covered by the Registration Statement.

(d) The Company shall use commercially reasonable efforts to register or qualify, and cooperate with the Holders of Registrable Securities covered by the Registration Statement in connection with the registration or qualification of such Registrable Securities for offer and sale under the securities or “blue sky” laws of each state and other jurisdiction of the United States as any such Holder reasonably requests in writing, and do any and all other things reasonably necessary or advisable to keep such registration or qualification in effect; provided, however, that the Company shall not be required to qualify generally to do business in any jurisdiction where it is not then so qualified or take any action which would subject it to taxation or general service of process in any such jurisdiction where it is not then so subject.

(e) The Company shall promptly notify (which notice shall be accompanied by an instruction to suspend the use of the prospectus) the Holders when a prospectus relating thereto is required to be delivered under the Securities Act of the happening of any event as a result of which any prospectus included in, or relating to, the Registration Statement, as then in effect, includes
an untrue statement of a material fact or omits to state a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading (provided that in no event shall such notice contain any material, non-public information), and, subject to Section 3.2(h), promptly prepare and file with the SEC a supplement to the related prospectus or amendment to such Registration Statement or any other required document so that, as thereafter delivered to the Holders, the prospectus will not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

(f) The Company shall use commercially reasonable efforts to prevent the issuance of any stop order or other suspension of effectiveness of the Registration Statement, or the suspension of the qualification of any of the Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension as soon as reasonably practicable and to notify the Holders of the issuance of such order and the resolution thereof or its receipt of actual notice of the initiation or threat of any proceeding for such purpose.

(g) The Company shall use commercially reasonable efforts to cause the Registrable Securities covered by the Registration Statement to be (i) listed on the New York Stock Exchange and (ii) reflected in the stock ledger maintained by the Company’s transfer agent.

(h) Notwithstanding anything in this Agreement to the contrary, at any time after the Registration Statement becomes effective the Company may delay the disclosure of material, non-public information concerning the Company or any of its subsidiaries if the Board of Directors of the Company has a valid business reason for determining that disclosure of such information is not in the best interests of the Company and such disclosure is not otherwise required (a “Grace Period”); provided, however, that the Company shall promptly (i) provide written notice to the Holders of the Grace Period (provided that in no event shall such notice contain any material, non-public information) and the date on which the Grace Period will begin, (ii) use commercially reasonable efforts to terminate a Grace Period as promptly as possible, and (iii) provide written notice to the Holders of the date on which the Grace Period ends; provided, further, that no Grace Period shall exceed thirty (30) consecutive days and during any twelve (12) month period such Grace Periods shall not exceed an aggregate of sixty (60) days; provided, further, the Company shall not register any securities for its own account or that of any other stockholder during such Grace Period. The provisions of Section 3.2(e) shall not be applicable during any Grace Period. Upon expiration of a Grace Period, the Company shall again be bound by the provisions of Section 3.2(e) with respect to the information giving rise thereto unless such material, non-public information is no longer applicable.

Section 3.3 Current Public Information. During the Effectiveness Period, the Company shall use commercially reasonable efforts to (i) make and keep public information available, as those terms are defined in Rule 144, until all the Registrable Securities cease to be Registrable Securities, and so long as a Holder owns any Registrable Securities, furnish to such Holder upon request a written statement by the Company as to its satisfaction of the current public
information requirements of Rule 144 and (ii) file with the SEC in a timely manner all reports and other documents required to be filed by the Company under the Securities Act and the Exchange Act.

**Section 3.4 Obligations of the Holders.**

(a) Each Holder shall furnish in writing to the Company such information regarding such Holder, the Registrable Securities held by such Holder and the intended method of disposition of the Registrable Securities held by such Holder as shall be reasonably required to effect the registration of such Registrable Securities and shall execute, or shall cause to be executed, such customary documents in connection with such registration as the Company may reasonably request. In connection therewith, upon the execution of this Agreement, each Holder shall complete, execute and deliver to the Company a selling securityholder notice and questionnaire in the form attached hereto as Exhibit B. At least five (5) Business Days prior to the first anticipated filing date of the Registration Statement, the Company shall notify each Holder of any additional information the Company requires from such Holder, and such Holder shall provide such information to the Company at least three (3) Business Days prior to the first anticipated filing date of the Registration Statement.

(b) Each Holder agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of the Registration Statement.

(c) Upon receipt of written notice from the Company of any event of the kind described in Section 3.2(e) or Section 3.2(f) or written notice of any Grace Period, each Holder shall forthwith discontinue disposition of Registrable Securities until such Holder has received copies of a supplemented or amended prospectus or until such Holder is advised in writing by the Company that the use of the prospectus may be resumed or that the Grace Period has ended. If so directed by the Company, such Holder shall use its commercially reasonable efforts to return to the Company (at the Company's expense) all copies of the prospectus covering such Registrable Securities current at the time of receipt of such notice other than permanent file copies then in such Holder's possession.

(d) No Holder shall use any free writing prospectus (as defined in Rule 405) in connection with the sale of Registrable Securities without the prior written consent of the Company.

(e) Each Holder covenants and agrees that it will comply with the prospectus delivery requirements of the Securities Act as applicable to it or an exemption therefrom in connection with sales of Registrable Securities pursuant to any Registration Statement.

**Section 3.5 Expenses of Registration.** All Registration Expenses incurred in connection with any registration, qualification or compliance hereunder shall be borne by the Company. All Selling Expenses in connection with the sale of any Registrable Securities shall be borne by the Holder(s) selling such Registrable Securities.

**Section 3.6 Transfer of Registration Rights.** The rights contained in Section 3.1 hereof to cause the Company to register the Registrable Securities, and the other rights set forth in this
Article III, may be assigned or otherwise conveyed by any Holder to any transferee of the Registrable Securities if the Transfer was permitted under Article II and the transferee agrees with the Company in writing to be bound by this Agreement.

ARTICLE IV
INDEMNIFICATION AND CONTRIBUTION

Section 4.1 Indemnification. In the event any Registrable Securities are included in the Registration Statement:

(a) The Company shall indemnify and hold harmless each Holder of Registrable Securities and such Holder’s officers, directors, employees, partners, members, agents (including brokers), representatives and Affiliates and each person, if any, who controls such Holder within the meaning of the Securities Act or the Exchange Act (each, a “Holder Indemnitee”), against any losses, claims, damages, liabilities or expenses to which they may become subject under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively, a “Violation”): (i) an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto or any documents incorporated therein by reference, (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made (in the case of any prospectus), not misleading, and (iii) a violation or alleged violation by the Company or its agents of any rule or regulation promulgated under the Securities Act or the Exchange Act applicable to the Company or its agents and relating to action or inaction required of the Company in connection with the Registration Statement, and the Company will pay to each such Holder Indemnitee, as accrued, any legal or other expenses reasonably incurred by he, she or it in connection with investigating or defending any such loss, claim, damage, liability, action or expense; provided, however, that the indemnification contained in this Section 4.1(a) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability, action or expense if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld, conditioned or delayed), nor shall the Company be liable for any such loss, claim, damage, liability, action or expense to the extent that it arises out of or is based upon a Violation which occurs (A) in reliance upon and in conformity with written information furnished by a Holder, (B) in connection with any failure of such person to deliver or cause to be delivered a prospectus made available by the Company in a timely manner, (C) in connection with any offers or sales effected by or on behalf of any Holder Indemnitee in violation of Section 3.4(c) of this Agreement, or (D) as a result of offers or sales effected by or on behalf of any Holder Indemnitee by means of a free writing prospectus (as defined in Rule 405) that was not authorized in writing by the Company. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of any such Holder Indemnitee, and shall survive the transfer of such securities by such Holder, and any termination of this Agreement.
(b) Each Holder, severally and not jointly, shall indemnify and hold harmless the Company and each of its officers, directors, employees, agents, representatives and Affiliates and persons, if any, who control the Company within the meaning of the Securities Act or the Exchange Act (each, a “Company Indemnitee”), against any losses, claims, damages, liabilities or expenses to which any of the Company Indemnitees may become subject under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereof) arise out of or are based upon any (i) untrue statement or alleged untrue statement of a material fact regarding such Holder and provided in writing by such Holder which is contained in the Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made (in the case of any prospectus), not misleading, in each case to the extent (and only to the extent) that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, preliminary or final prospectus, amendment or supplement thereto, in reliance upon and in conformity with written information furnished by such Holder, (iii) a violation or alleged violation by a Holder of any rule or regulation promulgated under the Securities Act or the Exchange Act applicable to such Holder and relating to action or inaction required of such Holder in connection with the registration of such Holder’s Registrable Securities or (iv) in connection with any offer or sales effected by or on behalf of such Holder in violation of Section 3.4(c) of this Agreement, and each Holder will pay, as accrued, any legal or other expenses reasonably incurred by any Company Indemnitee pursuant to this Section 4.1(b), in connection with investigating or defending any such loss, claim, damage, liability, action or expense as a result of a Holder’s untrue statement or omission or violation; provided, however, that the indemnification contained in this Section 4.1(b) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability, action or expense if such settlement is effected without the consent of such Holder (which consent shall not be unreasonably withheld, conditioned or delayed). Notwithstanding the foregoing, the amount any Holder will be obligated to pay pursuant to this Section 4.1(b) and Section 4.2 will be limited to an amount equal to the gross proceeds actually received by such Holder for the sale of the Registrable Securities pursuant to the Registration Statement which gives rise to such obligation to indemnify and/or contribute (less the aggregate amount of any damages which such Holder has otherwise been required to pay in respect of such loss, liability, claim, damage, or expense or any substantially similar loss, liability, claim, damage, or expense arising from the sale of such Registrable Securities). Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of any such Company Indemnitee, and shall survive the transfer of such securities by such Holder, and any termination of this Agreement.

(c) Promptly after receipt by a party to this Agreement entitled to indemnity hereunder (an “Indemnified Party”) under this Section 4.1 of notice of the commencement of any action (including any governmental action), such Indemnified Party will, if a claim in respect thereof is to be made against any party to this Agreement from whom indemnification may be sought under this Section 4.1 (an “Indemnifying Party”), deliver to the Indemnifying Party a written notice of the commencement thereof and the Indemnifying Party shall have the right to participate in, and, to the extent the Indemnifying Party so desires, jointly with any other Indemnifying Party similarly noticed, to assume the defense thereof with counsel reasonably satisfactory to the Indemnifying
Party; provided, however, that an Indemnified Party (together with all other Indemnified Parties which may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the reasonable fees and expenses of such counsel to be paid by the Indemnifying Party, if (i) the Indemnifying Party shall have failed to assume the defense of such claim within seven (7) days after receipt of notice of the claim and to employ counsel reasonably satisfactory to such Indemnified Party, as the case may be; or (ii) in the reasonable opinion of counsel retained by the Indemnified Party, representation of such Indemnified Party by such counsel would be inappropriate due to actual or potential differing interests (including the availability of differing legal defenses) between such Indemnified Party and any other party represented by such counsel in such proceeding. It is understood that the Indemnifying Party shall not, in connection with any proceeding in the same jurisdiction, be liable for fees or expenses of more than one separate counsel at any time for all such Indemnified Parties. The Indemnified Party shall cooperate fully with the Indemnifying Party in connection with any negotiation or defense of any such action or claim by the Indemnifying Party and shall furnish to the Indemnifying Party all information reasonably available to the Indemnified Party which relates to such action or claim. The Indemnifying Party shall keep the Indemnified Party reasonably apprised of the status of the defense or any settlement negotiations with respect thereto. No Indemnifying Party will, except with the consent of the Indemnified Party, consent to entry of any judgment or enter into any settlement that does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect of such action or claim. No Indemnifying Party shall be liable for any settlement of any action, claim or proceeding effected without its prior written consent; provided, however, that the Indemnifying Party shall not unreasonably withhold, delay or condition its consent. The failure to deliver written notice to the Indemnifying Party within a reasonable time of the commencement of any such action shall not relieve such Indemnifying Party of any liability to the Indemnified Party under this Section 4.1, except to the extent such failure to give notice has a material adverse effect on the ability of the Indemnifying Party to defend such action.

Section 4.2 Contribution. If the indemnification provided for in Section 4.1 is held by a court of competent jurisdiction to be unavailable to an Indemnified Party with respect to any loss, liability, claim, damage, or expense referred to therein, then the Indemnifying Party, in lieu of indemnifying such Indemnified Party hereunder, shall contribute to the amount paid or payable by such Indemnified Party as a result of such loss, liability, claim, damage, or expense in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party on the one hand and of the Indemnified Party on the other in connection with the statements or omissions that resulted in such loss, liability, claim, damage, or expense as well as any other relevant equitable considerations. The relative fault of the Indemnifying Party and of the Indemnified Party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the Indemnifying Party or by the Indemnified Party and the parties’ relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission. Notwithstanding the foregoing, the amount any Holder will be obligated to severally and not jointly contribute pursuant to this Section 4.2, together with Holder’s liability under Section 4.1(b), will be limited to an amount equal to the gross proceeds received by a Holder for the sale of the Registrable Securities pursuant to the Registration Statement which gives rise to such obligation to contribute and/or indemnify (less the aggregate amount of any damages which such Holder has otherwise been
required to pay in respect of such loss, liability, claim, damage, or expense or any substantially similar loss, liability, claim, damage, or expense arising from the sale of such Registrable Securities. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution hereunder from any person who was not guilty of such fraudulent misrepresentation.

ARTICLE V
GENERAL PROVISIONS

Section 5.1 Entire Agreement. This Agreement (including Exhibit A hereto) constitutes the entire understanding and agreement between the parties as to the matters covered herein and supersedes and replaces any prior understanding, agreement or statement of intent, in each case, written or oral, of any and every nature with respect thereto.

Section 5.2 Notices. All notices, waivers, consents and other communications to any party hereunder shall be in writing and shall be deemed given (i) when personally delivered, (ii) when receipt is electronically confirmed, if sent by email of a .pdf document, (iii) one (1) Business Day after deposit with a nationally recognized overnight courier, specifying next day delivery, with proof of receipt or (iv) three (3) Business Days after being sent by registered or certified mail, return receipt requested and postage prepaid. The addresses, email addresses and facsimile numbers for such notices and communications are those set forth on the signature pages hereof, or such other address, email address or facsimile numbers as may be designated in writing hereafter, in the same manner, by any such person.

Section 5.3 Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed an original copy of this Agreement and all of which, when taken together, shall constitute one instrument. The exchange of copies of this Agreement and manually executed signature pages by transmission by email of a .pdf of a handwritten original signature or signatures to the other parties hereto shall constitute effective execution and delivery of this Agreement and may be used in lieu of the original Agreement for all purposes. The signature of a party hereto transmitted by electronic means shall be deemed to be an original signature for any purpose.

Section 5.4 Amendment; Waiver. This Agreement may be amended or modified, and any provision hereof may be waived, in whole or in part, at any time pursuant to an agreement in writing executed by the Company and Holders holding a majority of the Registrable Securities at such time. Any failure by any party at any time to enforce any of the provisions of this Agreement shall not be construed a waiver of such provision or any other provisions hereof.

Section 5.5 Severability. If a court of competent jurisdiction finds that any term or provision of this Agreement is invalid, illegal or unenforceable under any Law or public policy, the remaining provisions of this Agreement shall remain in full force and effect if the economic and legal substance of this Agreement and the Transactions shall not be affected in any manner materially adverse to any party hereto. Any such term or provision found to be illegal, invalid or unenforceable only in part or in degree shall remain in full force and effect to the extent not invalid, illegal or unenforceable. Upon the determination that any term or provision is invalid, illegal or unenforceable,
the parties hereto intend that such provision shall be construed by modifying or limiting it so as to be valid and enforceable to the maximum extent possible under applicable Law and compatible with the consummation of the Transactions as originally intended.

Section 5.6. Governing Law; Venue. This Agreement and all claims or causes of action (whether sounding in contract or tort) arising under or related to this Agreement shall be governed by, and construed in accordance with, the Laws of the State of Delaware, without regard to any rule or principle that might refer the governance or construction of this Agreement to the Laws of another jurisdiction. In any action or proceeding between any of the parties hereto arising under or related to this Agreement, each of the parties hereto (i) knowingly, voluntarily, irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the state or federal courts located in the City and County of San Francisco, California, (ii) agrees that all claims in respect of any such action or proceeding shall be heard and determined exclusively in accordance with clause (i) of this Section 5.6, (iii) waives any objection to the laying of venue of any such action or proceeding in such courts, including any objection that any such action or proceeding has been brought in an inconvenient forum or that the court does not have jurisdiction over any party hereto and (iv) agrees that service of process upon such party in any such action or proceeding shall be effective if such process is given as a notice in accordance with Section 5.2. The parties hereto agree that any party hereto may commence a proceeding in a court other than the above-named courts solely for the purpose of enforcing an order or judgment issued by one of the above-named courts.

Section 5.7 Specific Performance. Each party acknowledges and agrees that the other parties hereto would be irreparably harmed and would not have any adequate remedy at law in the event that any of the provisions of this Agreement were not performed by such first party in accordance with their specific terms or were otherwise breached by such first party. Accordingly, each party agrees that the other parties hereto shall be entitled to an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement, this being in addition to any other remedy to which such parties are entitled at law or in equity.

(Next Page is Signature Page)
IN WITNESS WHEREOF, each of the parties has executed this Agreement as of the date first written above.

COMPANY:

INVITAE CORPORATION

By: /s/ Sean E. George, Ph.D.
Name: Sean E. George, Ph.D.
Title: President and Chief Executive Officer

Address for Notice:

1400 16th Street
San Francisco, California 94103
Attn: General Counsel
Facsimile No.:
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
GREG ALDERSON

/s/ Greg Alderson

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

MICHAEL ARCESE

/s/ Michael Arcese

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

URSULA ARCESE

/s/ Ursula Arcese

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
DAVID ARCESE

/s/ David Arcese

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

PETER ARCESE

/s/ Peter Arcese

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

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IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
KRISTINE ASHCRAFT

/s/ Kristine Ashcraft

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

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HOLDER:
TERESA AULINSKAS

/s/ Teresa Aulinskas

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

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IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
VALERIE BARON

/s/ Valerie Baron

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

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HOLDER:

BENAROYA RESEARCH INSTITUTE AT VIRGINIA MASON

By: /s/ Margaret McCormick
Name: Margaret McCormick
Title: Executive Director

Address for Notice:

Telephone No.: 

Facsimile No.: 

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

**HOLDER:**

ERIK BRUNSO

/s/ Erik Brunso

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

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IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

JOANNA BRUNSO

/s/ Joanna Brunso

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

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HOLDER:

RICHARD BYRNE

/s/ Richard Byrne

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

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HOLDER:

JANET CARBARY

/s/ Janet Carbary

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

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HOLDER:  
CANDACE CARNEGIE

/s/ Candace Carnegie

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

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HOLDER:

RICHARD BYRNE

/s/ Richard Byrne

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

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HOLDER:
NAPOLEON CALAS

/s/ Napoleon Calas

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

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HOLDER:

CHRISTINE CASSEL

/s/ Christine Cassel

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

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HOLDER:

SUSAN CARTER

/s/ Susan Carter

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

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HOLDER:
DAVID COLAIZZI

/s/ David Colaizzi

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

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HOLDER:
YUPING CHEN

/s/ Yuping Chen

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
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HOLDER:
HOWARD COLEMAN

/s/ Howard Coleman

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
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HOLDER:
MERLIN COLEMAN

/s/ Merlin Coleman

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

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HOLDER:

CARLA CORKERN

/s/ Carla Corkern

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
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HOLDER:
CHRISTOPHER CRAM

/s/ Christopher Cram

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
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HOLDER:

ERIC GABER

/s/ Eric Gaber

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

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HOLDER:

SAMUEL DAKIN

/s/ Samuel Dakin

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
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HOLDER:

STEPHEN GROSS

/s/ Stephen Gross

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

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HOLDER:
JUAN GARZA

/s/ Juan Garza

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

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HOLDER:
NEIL HAWTHORNE

/s/ Neil Hawthorne

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

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IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
SOLAN HOLDING BV

By: /s/ Sonia Capdeferro
Name: Sonia Capdeferro
Title: Director

By: /s/ Jan Hendrick Wille
Name: Jan Hendrick Wille
Title: Director

Address for Notice:

Telephone No.:

Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
HEBRIDEAN ADVISORY, LLC

By: /s/ John McLane
Name: John McLane
Title: Managing Partner

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
LAUREEN HINES

/s/ Laureen Hines

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

CHRIS HOWLETT

/s/ Chris Howlett

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

JENNIFER JOHNSON

/s/ Jennifer Johnson

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

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HOLDER:
MATTHEW LEHRIAN

/s/ Matthew Lehrian

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

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HOLDER:
ERIN LOMMEN

/s/ Erin Lommen

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

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HOLDER:
SCOTT REILY LOVE

/s/ Scott Reily Love

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
ANNE MARTENS

/s/ Anne Martens

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

JAY H MEAD LIVING TRUST

/s/ Jay H Mead
By: Jay H Mead

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

JESSICA OESTERHELD

/s/ Jessica Oesterheld

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

MEGAN OVERBY

/s/ Megan Overby

Address for Notice:

Telephone No.: 

Facsimile No.: 

Email Address: 

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:  
JOHN C. NELSON, MD

/s/ John C. Nelson, MD

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

ALEXANDER OVERBY

/s/ Alexander Overby

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
THE OVERBY LIVING TRUST

/s/ Ross Overby
By: Ross Overby

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

JOHN PATTERSON

/s/ John Patterson

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

ROBERT PATTerson

/s/ Robert Patterson

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:  
ANUP RAJU

/s/ Anup Raju

Address for Notice:

Telephone No.:  
Facsimile No.:  
Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

KANE ROBINSON

/s/ Kane Robinson

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
ALAN RUSSELL

/s/ Alan Russell

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
GERALD SCHNEIDER

/s/ Gerald Schneider

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
SEATTLE CHILDREN'S HOSPITAL

/s/ Kimberly Baggett
By:
Name: Kimberly Baggett
Title: Vice President, Center Business Operations

/s/ Erik Lausund
By:
Name: Erik Lausund
Title: Vice President, Research Operations

Address for Notice:

Telephone No.:

Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

ANIL SHAH

/s/ Anil Shah

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

MELISSA SHAH

/s/ Melissa Shah

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
BROOKE SHIOTANI

/s/ Brooke Shiotani

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
   SOLAN HOLDING BV

   /s/ Sonia Capdeferro
   By: Name: Sonia Capdeferro
       Title: Director

   /s/ Jan Hendrick Wille
   By: Name: Jan Hendrick Wille
       Title: Director

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

TIFFANY SORRELL

/s/ Tiffany Sorrell

Address for Notice:

Telephone No.: 

Facsimile No.: 

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
RYAN TARZY

/s/ Ryan Tarzy

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

TWR 2011 SL

/s/ Pedro Campos
Name: Pedro Campos
Title: Sole Administrator

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

**HOLDER:**

MICKEY URDEA

/s/ Mickey Urdea

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

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IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
ROBERTA WINTER

/s/ Roberta Winter

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

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IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:
SHANNON WEINTRAUB

/s/ Shannon Weintraub

Address for Notice:

Telephone No.:
Facsimile No.:
Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

JEFFREY WESTCOTT

/s/ Jeffrey Westcott

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

HOLDER:

KATHERINE WOLFGANG

/s/ Katherine Wolfgang

Address for Notice:

Telephone No.:

Facsimile No.:

Email Address:

[Signature Page to Registration Rights Agreement]
REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this “Agreement”) is made and entered into as of April 1, 2020 (the “Effective Date”) by and among Invitae Corporation, a Delaware corporation (the “Company”), and CFH Management, L.P., as assignee of David Colaizzi, Chris Howlett, Anthony Muhlenkamp, Gerald Schneider, and Matt Lehrian (the “Unitholders” and each individually as a “Unitholder”).

RECITALS

WHEREAS, the Company, the Unitholders, and Chris Howlett as Sellers’ Representative (as defined therein), have entered into that certain Unit Purchase Agreement dated as of March 10, 2020 (the “Purchase Agreement”), pursuant to which, on the Effective Date, the Company acquired 100% of the membership interest units of Genetic Solutions, LLC, a Pennsylvania limited liability company (“Genelex”) from the Unitholders (the “Unit Purchase”);

WHEREAS, in connection with the Unit Purchase and pursuant to the Purchase Agreement, the Company issued to the Unitholders at the Closing (as defined in the Purchase Agreement) shares of the Company’s common stock, par value $0.0001 per share, identified on Exhibit A hereto as Upfront Stock Consideration Shares (the “Shares”) pursuant to the Purchase Agreement; and

WHEREAS, in connection with the consummation of the transactions contemplated by the Purchase Agreement, the Company agreed to grant certain registration rights to the Unitholders as set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, the parties agree as follows:

ARTICLE I
DEFINITIONS

Section 1.1 Definitions. For purposes of this Agreement, the following terms and variations thereof have the meanings set forth below:

“Affiliate” means, with respect to any person, any other person that, directly or indirectly, controls, or is controlled by, or is under common control with, such person. For this purpose: (a) “control” (including, with its correlative meanings, “controlled by” and “under common control with”) means the possession, directly or indirectly, of the power to direct or cause the direction of management or policies of a Person, whether through the ownership of securities or partnership or other ownership interests, by contract or otherwise; and (b) “person” means any natural person, corporation, limited liability company, partnership, association, trust or other entity.

“Agreement” has the meaning set forth in the preamble.
“Business Day” means any day, other than a Saturday, Sunday or one on which banks are authorized by law to be closed in New York, New York.

“Company Indemnitee” has the meaning set forth in Section 4.1(b).

“Effective Date” has the meaning set forth in the preamble.

“Effectiveness Period” has the meaning set forth in Section 3.1(b).


“Grace Period” has the meaning set forth in Section 3.2(h).

“Holder” (collectively, “Holders”) means any Unitholder and any transferee permitted under Section 2.1 of Registrable Securities, in each case to the extent holding Registrable Securities.

“Holder Indemnitee” has the meaning set forth in Section 4.1(a).

“Indemnified Party” has the meaning set forth in Section 4.1(c).

“Indemnifying Party” has the meaning set forth in Section 4.1(c).

“Purchase Agreement” has the meaning set forth in the recitals.

“Registrable Securities” means the Shares issued to the Unitholders pursuant to the Purchase Agreement and any securities issued or issuable upon any stock split, dividend or other distribution, recapitalization or similar event with respect to such securities; provided, however, that Registrable Securities shall cease to be Registrable Securities with respect to a particular Holder when (i) such securities have been disposed of in accordance with the Registration Statement or pursuant to Rule 144; (ii) such securities may be sold pursuant to Rule 144 without any limitation as to manner-of-sale restrictions or volume limitations; or (iii) such securities cease to be outstanding.

“Registration Expenses” means all expenses incurred by the Company in effecting the registration pursuant to this Agreement, including all registration and filing fees, printing expenses, fees and disbursements of counsel for the Company, “blue sky” fees and expenses, and expenses of the Company’s independent registered public accounting firm in connection with any regular or special reviews or audits incident to or required by any such registration, but shall not include Selling Expenses.

“Registration Statement” has the meaning set forth in Section 3.1.

“Rule 144” means Rule 144 under the Securities Act or any successor or other similar rule, regulation or interpretation of the SEC that may at any time permit the sale of Registrable Securities to the public without registration.
“Rule 405” means Rule 405 under the Securities Act or any successor or other similar rule.

“Rule 415” means Rule 415 under the Securities Act or any successor or other similar rule providing for offering securities on a continuous or delayed basis.

“Rule 424” means Rule 424 under the Securities Act or any successor or other similar rule.

“Shares” has the meaning set forth in the recitals.

“SEC” means the Securities and Exchange Commission.

“Securities Act” means the Securities Act of 1933.

“Selling Expenses” means all discounts, selling commissions, fees of selling brokers, dealer managers and similar securities industry professionals and stock transfer taxes applicable to the sale of Registrable Securities and fees and disbursements of counsel for any Holder (other than the fees and disbursements of counsel for the Company included in Registration Expenses).

“Transfer” means, directly or indirectly, to sell, transfer, assign, pledge, encumber, hypothecate or similarly dispose of (by merger, testamentary disposition, operation of law or otherwise), either voluntarily or involuntarily, or to enter into any contract, option or other arrangement or understanding with respect to the sale, transfer, assignment, pledge, encumbrance, hypothecation or similar disposition of (by merger, testamentary disposition, operation of law or otherwise) any Shares.

“Violation” has the meaning set forth in Section 4.1(a).

ARTICLE II
TRANSFER RESTRICTIONS

Section 2.1 General Transfer Restrictions. The right of any Unitholder to Transfer any Shares held by it is subject to the restrictions set forth below.

(a) Each Unitholder acknowledges that the Shares have not been registered under the Securities Act and may not be Transferred except pursuant to an effective registration statement under the Securities Act or pursuant to an exemption from registration under the Securities Act. Each Unitholder covenants that the Shares will only be disposed of pursuant to an effective registration statement under, and in compliance with the requirements of, the Securities Act or pursuant to an available exemption from the registration requirements of the Securities Act, and in compliance with any applicable state and foreign securities laws. In connection with any Transfer of the Shares other than a Transfer (i) pursuant to an effective registration statement, (ii) to the
Company or (iii) pursuant to Rule 144, the Company may require the Unitholder to provide to the Company an opinion of counsel selected by the Unitholder and reasonably acceptable to the Company, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such Transfer does not require registration under the Securities Act.

(b) Each Unitholder agrees to the affixing, so long as is required by this Section 2.1, of the following legend on any certificate or book-entry position evidencing any of the Shares:

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “ACT”), OR ANY STATE SECURITIES LAWS AND MAY NOT BE TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN EXEMPTION THEREFROM UNDER THE ACT AND THE RULES AND REGULATIONS THEREUNDER AND APPLICABLE STATE SECURITIES LAWS.

Certificates or book-entry positions evidencing the Shares shall not be required to contain such legend or any other legend (i) following any sale of such Shares pursuant to an effective registration statement (including the Registration Statement described in Section 3.1) covering the resale of the Shares, (ii) following any sale of such Shares pursuant to Rule 144 or if the Shares are transferrable by a person who is not an Affiliate of the Company or the applicable Unitholder pursuant to Rule 144 without any volume or manner of sale restrictions thereunder, (iii) if Holder is not an Affiliate of the Company, six (6) months following the Closing, provided, however, that in the case of (i), (ii) and (iii), above, the Unitholder provides the Company with customary legal representation letters reasonably acceptable to the Company or (iv) if the Unitholder provides the Company with a legal opinion reasonably acceptable to the Company to the effect that the legend is not required under applicable requirements of the Securities Act. Whenever such restrictions shall cease and terminate as to any Shares, the Holder of such securities shall be entitled to receive from the Company upon a written request in writing, without expense, new securities of like tenor not bearing the legend set forth herein.

(c) Notwithstanding anything herein to the contrary, following registration of the Shares, each Unitholder agrees not to sell any Shares issued to such Unitholder if the sales of such shares would, when combined with the sale of any other Shares by such Unitholder in any one (1) day period, exceed five percent (5%) of the average daily trading volume of the Company’s common stock on the New York Stock Exchange over the five (5) trading days immediately preceding such date of sale; provided, however, that if the aggregate number of Shares represents less than fifty percent (50%) of the average daily trading volume of the Company’s common stock on the New York Stock Exchange over the five (5) trading days preceding the Closing Date (as defined in the Purchase Agreement) (the “Average Volume”), such resale volume limitations shall not apply. If the aggregate number of Shares issued to a Unitholder represents more than the Average Volume, the Company may place such legends or stock transfer restrictions on the Shares as shall be appropriate for enforcing the provisions of this Section 2(c).

ARTICLE III
REGISTRATION AND PROCEDURES
Section 3.1 S-3 Registration.

(a) In compliance with the terms of this Agreement, the Company shall prepare and file with the SEC a registration statement on Form S-3ASR (or such other form that the Company is then eligible to use if not eligible to use Form S-3ASR) covering the resale as a secondary offering to be made on a continuous basis pursuant to Rule 415 of all Registrable Securities. The registration statement (or new registration statement) required to be filed pursuant to this Section 3.1, together with any amendments and supplements to such registration statement, including post-effective amendments, and all exhibits and all materials incorporated by reference in such registration statement other than a registration statement on Form S-4 or S-8, is referred to herein as the “Registration Statement.”

(b) The Company shall exercise commercially reasonable efforts to prepare and file the Registration Statement with the SEC no later than fifteen (15) Business Days after the Closing Date; provided, however, that no filing of such Registration Statement shall be required during any period in which the Company’s insider trading policy would prohibit executive officers of the Company from trading in the Company’s securities. Subject to the terms of this Agreement, the Company shall use commercially reasonable efforts to have the Registration Statement declared effective as soon as practicable after such filing if not otherwise effective upon filing and to keep the Registration Statement continuously effective as promptly as practical and in compliance with the Securities Act and usable for resale of Registrable Securities covered thereby from the date of its initial effectiveness until the earlier of (i) the date on which such Registrable Securities have been disposed of in accordance with the Registration Statement or pursuant to Rule 144 or (ii) such Registrable Securities may be sold pursuant to Rule 144 without any limitation as to manner-of-sale restrictions or volume limitations (such period, the “Effectiveness Period”); provided, however, that nothing in this Agreement shall require the Company to maintain any Registration Statement once the Shares cease to be Registrable Securities.

(c) It shall be a condition precedent to the obligations of the Company to take any action pursuant to Section 3.1 or Section 3.2 with respect to Registrable Securities of a Holder that the Holder shall furnish to the Company such information regarding such Holder as required under Section 3.4(a).

Section 3.2 Registration Procedures; Company Obligations. The Company shall use commercially reasonable efforts to effect the registration of the Registrable Securities in accordance with Section 3.1, and in connection therewith shall have the following obligations:

(a) No later than the first Business Day after the Registration Statement becomes effective, the Company shall file with the SEC the final prospectus included therein pursuant to Rule 424. The Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, shall comply as to form and content with the applicable requirements of the Securities Act and shall not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading.
(b) Subject to Section 3.2(h), the Company shall prepare and file with the SEC such amendments and supplements to the Registration Statement and the prospectus used in connection with the Registration Statement as may be necessary to keep the Registration Statement effective and usable for resale of the Registrable Securities covered thereby at all times during the Effectiveness Period. The Company shall use commercially reasonable efforts to cause any post-effective amendment to the Registration Statement that is not effective upon filing to become effective as soon as practicable after such filing. No later than the first Business Day after a post-effective amendment to the Registration Statement becomes effective, the Company shall file with the SEC the final prospectus or prospectus supplement included therein pursuant to Rule 424.

(c) The Company shall as promptly as practicable notify the Holders of the time when the Registration Statement becomes effective or an amendment or supplement to any prospectus forming a part of such Registration Statement has been filed. The Company shall furnish to the Holders, without charge, such documents, including copies of any preliminary prospectus or final prospectus contained in the Registration Statement or any amendments or supplements thereto, as such Holder may reasonably request from time to time in order to facilitate the disposition of the Registrable Securities covered by the Registration Statement.

(d) The Company shall use commercially reasonable efforts to register or qualify, and cooperate with the Holders of Registrable Securities covered by the Registration Statement in connection with the registration or qualification of such Registrable Securities for offer and sale under the securities or “blue sky” laws of each state and other jurisdiction of the United States as any such Holder reasonably requests in writing, and do any and all other things reasonably necessary or advisable to keep such registration or qualification in effect; provided, however, that the Company shall not be required to qualify generally to do business in any jurisdiction where it is not then so qualified or take any action which would subject it to taxation or general service of process in any such jurisdiction where it is not then so subject.

(e) The Company shall promptly notify (which notice shall be accompanied by an instruction to suspend the use of the prospectus) the Holders when a prospectus relating thereto is required to be delivered under the Securities Act of the happening of any event as a result of which any prospectus included in, or relating to, the Registration Statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading (provided that in no event shall such notice contain any material, non-public information), and, subject to Section 3.2(h), promptly prepare and file with the SEC a supplement to the related prospectus or amendment to such Registration Statement or any other required document so that, as thereafter delivered to the Holders, the prospectus will not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

(f) The Company shall use commercially reasonable efforts to prevent the issuance of any stop order or other suspension of effectiveness of the Registration Statement, or the suspension of the qualification of any of the Registrable Securities for sale in any jurisdiction and,
if such an order or suspension is issued, to obtain the withdrawal of such order or suspension as soon as reasonably practicable and to notify the Holders of the issuance of such order and the resolution thereof or its receipt of actual notice of the initiation or threat of any proceeding for such purpose.

(g) The Company shall use commercially reasonable efforts to cause the Registrable Securities covered by the Registration Statement to be (i) listed on the New York Stock Exchange and (ii) reflected in the stock ledger maintained by the Company’s transfer agent.

(h) Notwithstanding anything in this Agreement to the contrary, at any time after the Registration Statement becomes effective the Company may delay the disclosure of material, non-public information concerning the Company or any of its subsidiaries if the Board of Directors of the Company has a valid business reason for determining that disclosure of such information is not in the best interests of the Company and such disclosure is not otherwise required (a “Grace Period”); provided, however, that the Company shall promptly (i) provide written notice to the Holders of the Grace Period (provided that in no event shall such notice contain any material, non-public information) and the date on which the Grace Period will begin, (ii) advise the Holders in writing to cease sales under the Registration Statement until the end of the Grace Period, (iii) use commercially reasonable efforts to terminate a Grace Period as promptly as possible, and (iv) provide written notice to the Holders of the date on which the Grace Period ends; provided, further, that no Grace Period shall exceed thirty (30) consecutive days and during any twelve (12) month period such Grace Periods shall not exceed an aggregate of sixty (60) days; provided, further, the Company shall not register any securities for its own account or that of any other stockholder during such Grace Period. The provisions of Section 3.2(e) shall not be applicable during any Grace Period. Upon expiration of a Grace Period, the Company shall again be bound by the provisions of Section 3.2(e) with respect to the information giving rise thereto unless such material, non-public information is no longer applicable.

Section 3.3 Current Public Information. During the Effectiveness Period, the Company shall use commercially reasonable efforts to (i) make and keep public information available, as those terms are defined in Rule 144, until all the Registrable Securities cease to be Registrable Securities, and so long as a Holder owns any Registrable Securities, furnish to such Holder upon request a written statement by the Company as to its satisfaction of the current public information requirements of Rule 144 and (ii) file with the SEC in a timely manner all reports and other documents required to be filed by the Company under the Securities Act and the Exchange Act.

Section 3.4 Obligations of the Holders.

(a) Each Holder shall furnish in writing to the Company such information regarding such Holder, the Registrable Securities held by such Holder and the intended method of disposition of the Registrable Securities held by such Holder as shall be reasonably required to effect the registration of such Registrable Securities and shall execute, or shall cause to be executed, such customary documents in connection with such registration as the Company may reasonably request. In connection therewith, upon the execution of this Agreement, each Holder shall complete,
execute and deliver to the Company a selling securityholder notice and questionnaire in the form attached hereto as Exhibit B. At least five (5) Business Days prior to the first anticipated filing date of the Registration Statement, the Company shall notify each Holder of any additional information the Company requires from such Holder, and such Holder shall provide such information to the Company at least three (3) Business Days prior to the first anticipated filing date of the Registration Statement.

(b) Each Holder agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of the Registration Statement.

(c) Upon receipt of written notice from the Company of any event of the kind described in Section 3.2(e) or Section 3.2(f) or written notice of any Grace Period, each Holder shall forthwith discontinue disposition of Registrable Securities until such Holder has received copies of a supplemented or amended prospectus or until such Holder is advised in writing by the Company that the use of the prospectus may be resumed or that the Grace Period has ended. If so directed by the Company, such Holder shall use its commercially reasonable efforts to return to the Company (at the Company's expense) all copies of the prospectus covering such Registrable Securities current at the time of receipt of such notice other than permanent file copies then in such Holder's possession.

(d) No Holder shall use any free writing prospectus (as defined in Rule 405) in connection with the sale of Registrable Securities without the prior written consent of the Company.

(e) Each Holder covenants and agrees that it will comply with the prospectus delivery requirements of the Securities Act as applicable to it or an exemption therefrom in connection with sales of Registrable Securities pursuant to any Registration Statement.

Section 3.5 Expenses of Registration. All Registration Expenses incurred in connection with any registration, qualification or compliance hereunder shall be borne by the Company. All Selling Expenses incurred in connection with any registration hereunder shall be borne by the Holders of the Registrable Securities so registered in proportion the Registrable Securities owned by such Holders.

Section 3.6 Transfer of Registration Rights. The rights contained in Section 3.1 hereof to cause the Company to register the Registrable Securities, and the other rights set forth in this Article III, may be assigned or otherwise conveyed by any Unitholder to any transferee of the Registrable Securities if the Transfer was permitted under Article II and the transferee agrees with the Company in writing to be bound by this Agreement.

ARTICLE IV
INDEMNIFICATION AND CONTRIBUTION

Section 4.1 Indemnification. In the event any Registrable Securities are included in the Registration Statement:
(a) The Company shall indemnify and hold harmless each Holder of Registrable Securities and such Holder’s officers, directors, employees, partners, members, agents (including brokers), representatives and Affiliates and each person, if any, who controls such Holder within the meaning of the Securities Act or the Exchange Act (each, a “Holder Indemnitee”), against any losses, claims, damages, liabilities or expenses to which they may become subject under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively, a “Violation”): (i) an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto or any documents incorporated therein by reference, (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, and (iii) a violation or alleged violation by the Company or its agents of any rule or regulation promulgated under the Securities Act or the Exchange Act applicable to the Company or its agents and relating to action or inaction required of the Company in connection with the Registration Statement, and the Company will pay to each such Holder Indemnitee, as accrued, any legal or other expenses reasonably incurred by he, she or it in connection with investigating or defending any such loss, claim, damage, liability, action or expense; provided, however, that the indemnification contained in this Section 4.1(a) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability, action or expense if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld, conditioned or delayed), nor shall the Company be liable for any such loss, claim, damage, liability, action or expense to the extent that it arises out of or is based upon a Violation which occurs (A) in reliance upon and in conformity with written information furnished by a Holder, (B) in connection with any failure of such person to deliver or cause to be delivered a prospectus made available by the Company in a timely manner, (C) in connection with any offers or sales effected by or on behalf of any Holder Indemnitee in violation of Section 3.4(c) of this Agreement, or (D) as a result of offers or sales effected by or on behalf of any Holder Indemnitee by means of a freewriting prospectus (as defined in Rule 405) that was not authorized in writing by the Company. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of any such Holder Indemnitee, and shall survive the transfer of such securities by such Holder, and any termination of this Agreement.

(b) Each Holder, severally and not jointly, shall indemnify and hold harmless the Company and each of its officers, directors, employees, agents, representatives and Affiliates and persons, if any, who control the Company within the meaning of the Securities Act or the Exchange Act (each, a “Company Indemnitee”), against any losses, claims, damages, liabilities or expenses to which any of the Company Indemnitees may become subject under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereof) arise out of or are based upon any (i) untrue statement or alleged untrue statement of a material fact regarding such Holder and provided in writing by such Holder which is contained in the Registration Statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, in
each case to the extent (and only to the extent) that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, preliminary or final prospectus, amendment or supplement thereto, in reliance upon and in conformity with written information furnished by such Holder, (iii) a violation or alleged violation by a Holder of any rule or regulation promulgated under the Securities Act or the Exchange Act applicable to such Holder and relating to action or inaction required of such Holder in connection with the registration of such Holder’s Registrable Securities or (iv) in connection with any offer or sales effected by or on behalf of such Holder in violation of Section 3.4(c) of this Agreement, and each Holder will pay, as accrued, any legal or other expenses reasonably incurred by any Company Indemnitee pursuant to this Section 4.1(b), in connection with investigating or defending any such loss, claim, damage, liability, action or expense as a result of a Holder’s untrue statement or omission or violation; provided, however, that the indemnification contained in this Section 4.1(b) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability, action or expense if such settlement is effected without the consent of such Holder (which consent shall not be unreasonably withheld, conditioned or delayed). Notwithstanding the foregoing, the amount any Holder will be obligated to pay pursuant to this Section 4.1(b) and Section 4.2 will be limited to an amount equal to the gross proceeds actually received by such Holder for the sale of the Registrable Securities pursuant to the Registration Statement which gives rise to such obligation to indemnify and/or contribute (net of all expenses paid by such Holder in connection with any claim relating to this Section 4.1(b) and Section 4.2 and the aggregate amount of any damages which such Holder has otherwise been required to pay in respect of such loss, liability, claim, damage, or expense or any substantially similar loss, liability, claim, damage, or expense arising from the sale of such Registrable Securities). Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of any such Company Indemnitee, and shall survive the transfer of such securities by such Holder, and any termination of this Agreement.

(c) Promptly after receipt by a party to this Agreement entitled to indemnity hereunder (an “Indemnified Party”) under this Section 4.1 of notice of the commencement of any action (including any governmental action), such Indemnified Party will, if a claim in respect thereof is to be made against any party to this Agreement from whom indemnification may be sought under this Section 4.1 (an “Indemnifying Party”), deliver to the Indemnifying Party a written notice of the commencement thereof and the Indemnifying Party shall have the right to participate in, and, to the extent the Indemnifying Party so desires, jointly with any other Indemnifying Party similarly noticed, to assume the defense thereof with counsel reasonably satisfactory to the Indemnifying Party; provided, however, that an Indemnified Party (together with all other Indemnified Parties which may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the reasonable fees and expenses of such counsel to be paid by the Indemnifying Party, if (i) the Indemnifying Party shall have failed to assume the defense of such claim within seven (7) days after receipt of notice of the claim and to employ counsel reasonably satisfactory to such Indemnified Party, as the case may be; or (ii) in the reasonable opinion of counsel retained by the Indemnified Party, representation of such Indemnified Party by such counsel would be inappropriate due to actual or potential differing interests (including the availability of differing legal defenses) between such Indemnified Party and any other party represented by such counsel in such proceeding. It is understood that the Indemnifying Party shall not, in connection with any proceeding in the same jurisdiction, be liable for fees or expenses of more than one separate counsel.
at any time for all such Indemnified Parties. The Indemnified Party shall cooperate fully with the Indemnifying Party in connection with any negotiation or defense of any such action or claim by the Indemnifying Party and shall furnish to the Indemnifying Party all information reasonably available to the Indemnified Party which relates to such action or claim. The Indemnifying Party shall keep the Indemnified Party reasonably apprised of the status of the defense or any settlement negotiations with respect thereto. No Indemnifying Party will, except with the consent of the Indemnified Party, consent to entry of any judgment or enter into any settlement that does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect of such action or claim. No Indemnifying Party shall be liable for any settlement of any action, claim or proceeding effected without its prior written consent; provided, however, that the Indemnifying Party shall not unreasonably withhold, delay or condition its consent. The failure to deliver written notice to the Indemnifying Party within a reasonable time of the commencement of any such action shall not relieve such Indemnifying Party of any liability to the Indemnified Party under this Section 4.1, except to the extent such failure to give notice has a material adverse effect on the ability of the Indemnifying Party to defend such action.

Section 4.2 Contribution. If the indemnification provided for in Section 4.1 is held by a court of competent jurisdiction to be unavailable to an Indemnified Party with respect to any loss, liability, claim, damage, or expense referred to therein, then the Indemnifying Party, in lieu of indemnifying such Indemnified Party hereunder, shall contribute to the amount paid or payable by such Indemnified Party as a result of such loss, liability, claim, damage, or expense in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party on the one hand and of the Indemnified Party on the other in connection with the statements or omissions that resulted in such loss, liability, claim, damage, or expense as well as any other relevant equitable considerations. The relative fault of the Indemnifying Party and of the Indemnified Party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the Indemnifying Party or by the Indemnified Party and the parties’ relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission. Notwithstanding the foregoing, the amount any Holder will be obligated to severally and not jointly contribute pursuant to this Section 4.2, together with Holder’s liability under Section 4.1(b), will be limited to an amount equal to the gross proceeds received by a Holder for the sale of the Registrable Securities pursuant to the Registration Statement which gives rise to such obligation to contribute and/or indemnify (net of all expenses paid by such Holder in connection with any claim relating to Section 4.1(b) and this Section 4.2 and the aggregate amount of any damages which such Holder has otherwise been required to pay in respect of such loss, liability, claim, damage, or expense or any substantially similar loss, liability, claim, damage, or expense arising from the sale of such Registrable Securities). No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution hereunder from any person who was not guilty of such fraudulent misrepresentation.

ARTICLE V
GENERAL PROVISIONS

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Section 5.1 Entire Agreement. This Agreement (including Exhibit A hereto) constitutes the entire understanding and agreement between the parties as to the matters covered herein and supersedes and replaces any prior understanding, agreement or statement of intent, in each case, written or oral, of any and every nature with respect thereto.

Section 5.2 Notices. Any notice or other communication required or permitted to be delivered to any party under this Agreement shall be in writing and shall be deemed properly delivered, given and received (a) upon receipt when delivered by hand, (b) upon transmission, if sent by facsimile or electronic transmission (in each case with receipt verified by electronic confirmation), or (c) one (1) Business Day after being sent by courier or express delivery service, specifying next day delivery, with proof of receipt. The addresses, email addresses and facsimile numbers for such notices and communications are those set forth on the signature pages hereof, or such other address, email address or facsimile numbers as may be designated in writing hereafter, in the same manner, by any such person.

Section 5.3 Counterparts. This Agreement may be executed in one or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other parties, it being understood that all parties need not sign the same counterpart and such counterparts may be delivered by the parties hereto via facsimile or electronic transmission.

Section 5.4 Amendment; Waiver. This Agreement may be amended or modified, and any provision hereof may be waived, in whole or in part, at any time pursuant to an agreement in writing executed by the Company and Holders holding a majority of the Registrable Securities at such time. Any failure by any party at any time to enforce any of the provisions of this Agreement shall not be construed a waiver of such provision or any other provisions hereof.

Section 5.5 Severability. In the event that any provision of this Agreement or the application thereof becomes or is declared by a court of competent jurisdiction to be illegal, void or unenforceable, the remainder of this Agreement will continue in full force and effect and the application of such provision to other persons or circumstances will be interpreted so as reasonably to effect the intent of the parties hereto.

Section 5.6 Governing Law; Venue. This Agreement and all claims or causes of action (whether sounding in contract or tort) arising under or related to this Agreement, shall be governed by and construed in accordance with, the Laws of the State of California, without regard to any rule or principle that might refer the governance or construction of this Agreement to the Laws of another jurisdiction. In any action or proceeding between any of the parties arising under or related to this Agreement, each of the parties (a) knowingly, voluntarily, irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the state or federal courts located in the City and County of San Francisco, California, and each of the Parties hereby irrevocably submits to the exclusive jurisdiction of the aforesaid courts, (b) agrees that all claims in respect of any such action or proceeding shall be heard and determined exclusively in accordance with clause (a) of this Section 5.6, (c) waives any objection to the laying of venue of any such action or proceeding in such courts, including any objection that any such action or proceeding has been brought in an inconvenient forum or that the court does not have jurisdiction over any party, and (d) agrees that service of
process upon such party in any such action or proceeding shall be effective if such process is given as a notice in accordance with Section 5.2. The parties agree that any party may commence a proceeding in a court other than the above-named courts solely for the purpose of enforcing an order or judgment issued by one of the above-named courts.

Section 5.7 Specific Performance. Each party acknowledges and agrees that the other parties hereto would be irreparably harmed and would not have any adequate remedy at law in the event that any of the provisions of this Agreement were not performed by such first party in accordance with their specific terms or were otherwise breached by such first party. Accordingly, each party agrees that the other parties hereto shall be entitled to an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement, this being in addition to any other remedy to which such parties are entitled at law or in equity.

(Next Page is Signature Page)
IN WITNESS WHEREOF, each of the parties has executed this Agreement as of the date first written above.

COMPANY:

INVITAE CORPORATION

By: /s/ Sean E. George, Ph.D.
Name: Sean E. George, Ph.D.
Title: President and Chief Executive Officer

Address for Notice:

1400 16th Street
San Francisco, California 94103

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

UNITHOLDER:

CFH MANAGEMENT L.P.
By: CFH General Management, LLC
Its: General Partner

/s/ David Colaizzi

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

UNITHOLDER:

/s/ Chris Howlett

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

UNITHOLDER:

/s/ Matt Lehrian

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

UNITHOLDER:

/s/ Anthony Muhlenkamp

[Signature Page to Registration Rights Agreement]
IN WITNESS WHEREOF, each of the undersigned has executed this Agreement as of the date first written above.

UNITHOLDER:

/s/ Gerald Schneider

[Signature Page to Registration Rights Agreement]
INVITAE CORPORATION

2015 STOCK INCENTIVE PLAN

(As Amended and Restated by the Board of Directors on June 12, 2020)
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SECTION 1. ESTABLISHMENT AND PURPOSE.

The Plan was adopted by the Board of Directors on January 8, 2015 and became effective immediately prior to the closing of the initial offering of Stock to the public pursuant to a registration statement filed by the Company with the Securities and Exchange Commission (the “Effective Date”), was amended and restated on June 11, 2019, and was further amended and restated on March 6, 2020 and June 12, 2020. The purpose of the Plan is to promote the long-term success of the Company and the creation of stockholder value by (a) encouraging Employees, Outside Directors and Consultants to focus on critical long-range objectives, (b) encouraging the attraction and retention of Employees, Outside Directors and Consultants with exceptional qualifications and (c) linking Employees, Outside Directors and Consultants directly to stockholder interests through increased stock ownership. The Plan seeks to achieve this purpose by providing for Awards in the form of restricted shares, stock units, options (which may constitute incentive stock options or nonstatutory stock options), stock appreciation rights or cash-based awards.

SECTION 2. DEFINITIONS.

(a) “Affiliate” shall mean any entity other than a Subsidiary, if the Company and/or one or more Subsidiaries own not less than 50% of such entity.

(b) “Award” shall mean any award of an Option, a SAR, a Restricted Share or a Stock Unit or a Cash-Based Award under the Plan.

(c) “Award Agreement” shall mean the agreement between the Company and the recipient of an Award which contains the terms, conditions and restrictions pertaining to such Award.

(d) “Board of Directors” or “Board” shall mean the Board of Directors of the Company, as constituted from time to time.

(e) “Cash-Based Award” shall mean an Award that entitles the Participant to receive a cash-denominated payment.

(f) “Change in Control” shall mean the occurrence of any of the following events:

(i) A change in the composition of the Board of Directors occurs, as a result of which fewer than one-half of the incumbent directors are directors who either:

   (A) Had been directors of the Company on the “look-back date” (as defined below) (the “original directors”); or

   (B) Were elected, or nominated for election, to the Board of Directors with the affirmative votes of at least a majority of the aggregate of the original directors who were still in office at the time of the election or nomination and the directors whose election or nomination was previously so approved (the “continuing directors”);

provided, however, that for this purpose, the “original directors” and “continuing directors” shall not include any individual whose initial assumption of office occurred as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents, by or on behalf of a person other than the Board; or

(ii) Any “person” (as defined below) who by the acquisition or aggregation of securities, is or becomes the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Company representing 50% or more of the combined voting power of the Company’s then outstanding securities ordinarily (and apart from rights accruing under special circumstances) having the right to vote at elections of directors (the “Base Capital Stock”); except that any change in the relative beneficial ownership of the Company’s securities by any person resulting solely from a reduction in the aggregate number of outstanding shares of Base Capital Stock, and any decrease thereafter in such person’s ownership of securities, shall be disregarded until such person increases in any manner, directly or indirectly, such person’s beneficial ownership of any securities of the Company; or
(iii) The consummation of a merger or consolidation of the Company or a Subsidiary of the Company with or into another entity or any other corporate reorganization, if persons who were not stockholders of the Company immediately prior to such merger, consolidation or other reorganization own immediately after such merger, consolidation or other reorganization 50% or more of the voting power of the outstanding securities of each of (A) the Company (or its successor) and (B) any direct or indirect parent corporation of the Company (or its successor); or

(iv) The sale, transfer or other disposition of all or substantially all of the Company’s assets.

For purposes of subsection (e)(i) above, the term “look-back” date shall mean the later of (1) the Effective Date or (2) the date 24 months prior to the date of the event that may constitute a Change in Control.

For purposes of subsection (e)(ii) above, the term “person” shall have the same meaning as when used in Sections 13(d) and 14(d) of the Exchange Act but shall exclude (1) a trustee or other fiduciary holding securities under an employee benefit plan maintained by the Company or a Parent or Subsidiary and (2) a corporation owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of the Stock.

Any other provision of this Section 2(e) notwithstanding, a transaction shall not constitute a Change in Control if its sole purpose is to change the state of the Company’s incorporation or to create a holding company that will be owned in substantially the same proportions by the persons who held the Company’s securities immediately before such transaction, and a Change in Control shall not be deemed to occur if the Company files a registration statement with the United States Securities and Exchange Commission for the initial or secondary public offering of securities or debt of the Company to the public.

(g) “Code” shall mean the Internal Revenue Code of 1986, as amended.

(h) “Committee” shall mean the Compensation Committee as designated by the Board of Directors, which is authorized to administer the Plan, as described in Section 3 hereof.

(i) “Company” shall mean Invitae Corporation, a Delaware corporation.

(j) “Consultant” shall mean a consultant or advisor who provides bona fide services to the Company, a Parent, a Subsidiary or an Affiliate as an independent contractor (not including service as a member of the Board of Directors) or a member of the board of directors of a Parent or a Subsidiary, in each case who is not an Employee.

(k) “Employee” shall mean any individual who is a common-law employee of the Company, a Parent, a Subsidiary or an Affiliate.


(m) “Exercise Price” shall mean, in the case of an Option, the amount for which one Share may be purchased upon exercise of such Option, as specified in the applicable Stock Option Agreement. “Exercise Price,” in the case of a SAR, shall mean an amount, as specified in the applicable SAR Agreement, which is subtracted from the Fair Market Value of one Share in determining the amount payable upon exercise of such SAR.

(n) “Fair Market Value” with respect to a Share, shall mean the market price of one Share, determined by the Committee as follows:

(i) If the Stock was traded over-the-counter on the date in question, then the Fair Market Value shall be equal to the last transaction price quoted for such date by the OTC Bulletin Board or, if not so quoted, shall be equal to the mean between the last reported representative bid and asked prices quoted for such date by the principal automated inter-dealer quotation system on which the Stock is quoted or, if the Stock is not quoted on any such system, by the Pink Quote system;

(ii) If the Stock was traded on any established stock exchange (such as the New York Stock Exchange, The Nasdaq Global Market or The Nasdaq Global Select Market) or national market system on the date in question, then the Fair Market Value shall be equal to the closing price reported for such date by the applicable exchange or system; and

(iii) If none of the foregoing provisions is applicable, then the Fair Market Value shall be determined by the Committee in good faith on such basis as it deems appropriate.
In all cases, the determination of Fair Market Value by the Committee shall be conclusive and binding on all persons.

(o) “ISO” shall mean an employee incentive stock option described in Section 422 of the Code.

(p) “Nonstatutory Option” or “NSO” shall mean an employee stock option that is not an ISO.

(q) “Option” shall mean an ISO or Nonstatutory Option granted under the Plan and entitling the holder to purchase Shares.

(r) “Outside Director” shall mean a member of the Board of Directors who is not a common-law employee of, or paid consultant to, the Company, a Parent or a Subsidiary.

(s) “Parent” shall mean any corporation (other than the Company) in an unbroken chain of corporations ending with the Company, if each of the corporations other than the Company owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. A corporation that attains the status of a Parent on a date after the adoption of the Plan shall be a Parent commencing as of such date.

(t) “Participant” shall mean a person who holds an Award.

(u) “Performance Based Award” shall mean any Restricted Share Award, Stock Unit Award or Cash-Based Award granted to a Participant pursuant to the terms set forth in Section 20.

(v) “Plan” shall mean this 2015 Stock Incentive Plan of Invitae Corporation, as amended from time to time.

(w) “Purchase Price” shall mean the consideration for which one Share may be acquired under the Plan (other than upon exercise of an Option), as specified by the Committee.

(x) “Restricted Share” shall mean a Share awarded under the Plan.

(y) “SAR” shall mean a stock appreciation right granted under the Plan.

(z) “Service” shall mean service as an Employee, Consultant or Outside Director, subject to such further limitations as may be set forth in the Plan or the applicable Award Agreement. Service does not terminate when an Employee goes on a bona fide leave of absence, that was approved by the Company in writing, if the terms of the leave provide for continued Service crediting, or when continued Service crediting is required by applicable law. However, for purposes of determining whether an Option is entitled to ISO status, an Employee’s employment will be treated as terminating three months after such Employee went on leave, unless such Employee’s right to return to active work is guaranteed by law or by a contract. Service terminates in any event when the approved leave ends, unless such Employee immediately returns to active work. The Company determines which leaves of absence count toward Service, and when Service terminates for all purposes under the Plan.

(aa) “Share” shall mean one share of Stock, as adjusted in accordance with Section 12 (if applicable).

(bb) “Stock” shall mean the Common Stock of the Company.

(cc) “Stock Unit” shall mean a bookkeeping entry representing the Company’s obligation to deliver one Share (or distribute cash) on a future date in accordance with the provisions of a Stock Unit Award Agreement.

(dd) “Subsidiary” shall mean any corporation, if the Company and/or one or more other Subsidiaries own not less than 50% of the total combined voting power of all classes of outstanding stock of such corporation. A corporation that attains the status of a Subsidiary on a date after the adoption of the Plan shall be considered a Subsidiary commencing as of such date.

(ee) “Total and Permanent Disability” shall mean any permanent and total disability as defined by Section 22(e)(3) of the Code.

SECTION 3. ADMINISTRATION.

(a) Committee Composition. The Plan shall be administered by a Committee appointed by the Board, or by the Board acting as the Committee. The Committee shall consist of two or more directors of the Company. In addition, to the extent required by the Board, the composition of the Committee shall satisfy (i) such requirements as the Securities and Exchange Commission may establish for administrators acting under plans intended to qualify for exemption under Rule 16b-3 (or its successor) under the Exchange Act; and (ii) such requirements as the Internal Revenue Service may establish for outside directors acting under plans.
intended to qualify for exemption under Section 162(m)(4)(C) of the Code.

(b) Committee for Non-Officer Grants. The Board may also appoint one or more separate committees of the Board, each composed of one or more directors of the Company who need not satisfy the requirements of Section 3(a), who may administer the Plan with respect to Employees who are not considered officers or directors of the Company under Section 16 of the Exchange Act, may grant Awards under the Plan to such Employees and may determine all terms of such grants. Within the limitations of the preceding sentence, any reference in the Plan to the Committee shall include such committee or committees appointed pursuant to the preceding sentence. To the extent permitted by applicable laws, the Board of Directors may also authorize one or more officers of the Company to designate Employees, other than officers under Section 16 of the Exchange Act, to receive Awards and/or to determine the number of such Awards to be received by such persons; provided, however, that the Board of Directors shall specify the total number of Awards that such officers may so award.

(c) Committee Procedures. The Board of Directors shall designate one of the members of the Committee as chairman. The Committee may hold meetings at such times and places as it shall determine. The acts of a majority of the Committee members present at meetings at which a quorum exists, or acts reduced to or approved in writing (including via email) by all Committee members, shall be valid acts of the Committee.

(d) Committee Responsibilities. Subject to the provisions of the Plan, the Committee shall have full authority and discretion to take the following actions:

(i) To interpret the Plan and to apply its provisions;

(ii) To adopt, amend or rescind rules, procedures and forms relating to the Plan;

(iii) To adopt, amend or terminate sub-plans established for the purpose of satisfying applicable foreign laws including qualifying for preferred tax treatment under applicable foreign tax laws;

(iv) To authorize any person to execute, on behalf of the Company, any instrument required to carry out the purposes of the Plan;

(v) To determine when Awards are to be granted under the Plan;

(vi) To select the Participants to whom Awards are to be granted;

(vii) To determine the type of Award and number of Shares or amount of cash to be made subject to each Award;

(viii) To prescribe the terms and conditions of each Award, including (without limitation) the Exercise Price and Purchase Price, and the vesting or duration of the Award (including accelerating the vesting of Awards, either at the time of the Award or thereafter, without the consent of the Participant), to determine whether an Option is to be classified as an ISO or as a Nonstatutory Option, and to specify the provisions of the agreement relating to such Award;

(ix) To amend any outstanding Award Agreement, subject to applicable legal restrictions and to the consent of the Participant if the Participant’s rights or obligations would be materially impaired;

(x) To prescribe the consideration for the grant of each Award or other right under the Plan and to determine the sufficiency of such consideration;

(xi) To determine the disposition of each Award or other right under the Plan in the event of a Participant’s divorce or dissolution of marriage;

(xii) To determine whether Awards under the Plan will be granted in replacement of other grants under an incentive or other compensation plan of an acquired business;

(xiii) To correct any defect, supply any omission, or reconcile any inconsistency in the Plan or any Award Agreement;

(xiv) To establish or verify the extent of satisfaction of any performance goals or other conditions applicable to the grant, issuance, exercisability, vesting and/or ability to retain any Award; and

(xv) To take any other actions deemed necessary or advisable for the administration of the Plan.
Subject to the requirements of applicable law, the Committee may designate persons other than members of the Committee to carry out its responsibilities and may prescribe such conditions and limitations as it may deem appropriate, except that the Committee may not delegate its authority with regard to the selection for participation of or the granting of Awards under the Plan to persons subject to Section 16 of the Exchange Act. All decisions, interpretations and other actions of the Committee shall be final and binding on all Participants and all persons deriving their rights from a Participant. No member of the Committee shall be liable for any action that he has taken or has failed to take in good faith with respect to the Plan or any Award under the Plan.

SECTION 4. ELIGIBILITY.

(a) General Rule. Only Employees, Consultants and Outside Directors shall be eligible for the grant of Awards. Only common-law employees of the Company, a Parent or a Subsidiary shall be eligible for the grant of ISOs.

(b) Ten-Percent Stockholders. An Employee who owns more than 10% of the total combined voting power of all classes of outstanding stock of the Company, a Parent or Subsidiary shall not be eligible for the grant of an ISO unless such grant satisfies the requirements of Section 422(c)(5) of the Code.

(c) Attribution Rules. For purposes of Section 4(c) above, in determining stock ownership, an Employee shall be deemed to own the stock owned, directly or indirectly, by or for such Employee’s brothers, sisters, spouse, ancestors and lineal descendants. Stock owned, directly or indirectly, by or for a corporation, partnership, estate or trust shall be deemed to be owned proportionately by or for its stockholders, partners or beneficiaries.

(d) Outstanding Stock. For purposes of Section 4(c) above, “outstanding stock” shall include all stock actually issued and outstanding immediately after the grant. “Outstanding stock” shall not include shares authorized for issuance under outstanding options held by the Employee or by any other person.

SECTION 5. STOCK SUBJECT TO PLAN.

(a) Basic Limitation. Shares offered under the Plan shall be authorized but unissued Shares or treasury Shares. The aggregate number of Shares authorized for issuance as Awards under the Plan (other than Inducement Awards as set forth in Section 15) shall not exceed the sum of (x) 6,000,000 Shares, plus (y) the sum of the number of Shares subject to outstanding awards under the Company’s 2010 Stock Plan (the “Predecessor Plan”) on the Effective Date that are subsequently forfeited, plus (z) an annual increase on the first day of each fiscal year, for a period of not more than ten years, beginning on January 1, 2016, and ending on (and including) January 1, 2025, in an amount equal to the lesser of (i) four percent (4%) of the outstanding Shares on the last day of the immediately preceding fiscal or (ii) if the Board acts prior to the first day of the fiscal year, such lesser amount (including zero) that the Board determines for purposes of the annual increase for that fiscal year. Notwithstanding the foregoing, the number of Shares that may be delivered in the aggregate pursuant to the exercise of ISOs granted under the Plan shall not exceed 16,833,333 Shares plus, to the extent allowable under Section 422 of the Code and the Treasury Regulations promulgated thereunder, any Shares that become available for issuance under the Plan pursuant to Section 5(c). The limitations of this Section 5(a) shall be subject to adjustment pursuant to Section 12. The number of Shares that are subject to Awards outstanding at any time under the Plan shall not exceed the number of Shares which then remain available for issuance under the Plan. The Company shall at all times reserve and keep available sufficient Shares to satisfy the requirements of the Plan.

(b) Award Limitation. No Participant eligible for an Award may receive Options or SARs under the Plan, excluding Inducement Awards, in any calendar year that relate to an aggregate of more than 2,000,000 Shares, and no more than two times this amount in the first year of employment. In applying the foregoing limitation with respect to a Participant, if any Option or SAR is canceled, the canceled Option or SAR shall continue to count against the maximum number of Shares with respect to which Options and SARs may be granted to the Participant. For this purpose, the repricing of an Option or SAR shall be treated as the cancellation of the existing Option or SAR and the grant of a new Option or SAR.

(c) Additional Shares. If Restricted Shares or Shares issued upon the exercise of Options are forfeited, then such Shares shall again become available for Awards under the Plan. If Stock Units, Options or SARs are forfeited or terminate for any reason before being exercised or settled, or an Award is settled in cash without the delivery of Shares to the holder, then any Shares subject to the Award shall again become available for Awards under the Plan. Only the number of Shares (if any) actually issued in settlement of Awards (and not forfeited) shall reduce the number available in Section 5(a) and the balance shall again become available for Awards under the Plan. Any Shares withheld to satisfy the grant or exercise price or tax withholding obligation pursuant to any Award shall again become available for Awards under the Plan. Notwithstanding the foregoing provisions of this Section 5(c), Shares that have actually been issued shall not again become available for Awards under the Plan, except for Shares that are forfeited and do not become vested.
Substitution and Assumption of Awards. The Committee may make Awards under the Plan by assumption, substitution or replacement of stock options, stock appreciation rights, stock units or similar awards granted by another entity (including a Parent or Subsidiary), if such assumption, substitution or replacement is in connection with an asset acquisition, stock acquisition, merger, consolidation or similar transaction involving the Company (and/or its Parent or Subsidiary) and such other entity (and/or its affiliate). The terms of such assumed, substituted or replaced Awards shall be as the Committee, in its discretion, determines is appropriate. Any such substitute or assumed Awards shall not count against the Share limitation set forth in Section 5(a).

SECTION 6. RESTRICTED SHARES.

(a) Restricted Share Award Agreement. Each grant of Restricted Shares under the Plan shall be evidenced by a Restricted Share Award Agreement between the Participant and the Company. Such Restricted Shares shall be subject to all applicable terms of the Plan and may be subject to any other terms that are not inconsistent with the Plan. The provisions of the various Restricted Share Award Agreements entered into under the Plan need not be identical.

(b) Payment for Awards. Restricted Shares may be sold or awarded under the Plan for such consideration as the Committee may determine, including (without limitation) cash, cash equivalents, full-recourse promissory notes, past services and future services.

(c) Vesting. Each Award of Restricted Shares may or may not be subject to vesting. Vesting shall occur, in full or in installments, upon satisfaction of the conditions specified in the Restricted Share Award Agreement. A Restricted Share Award Agreement may provide for accelerated vesting in the event of the Participant’s death, disability or retirement or other events. The Committee may determine, at the time of granting Restricted Shares or thereafter, that all or part of such Restricted Shares shall become vested in the event that a Change in Control occurs with respect to the Company.

(d) Voting and Dividend Rights. The holders of Restricted Shares awarded under the Plan shall have the same voting, dividend and other rights as the Company’s other stockholders. A Restricted Share Award Agreement, however, may require that the holders of Restricted Shares invest any cash dividends received in additional Restricted Shares. Such additional Restricted Shares shall be subject to the same conditions and restrictions as the Award with respect to which the dividends were paid.

(e) Restrictions on Transfer of Shares. Restricted Shares shall be subject to such rights of repurchase, rights of first refusal or other restrictions as the Committee may determine. Such restrictions shall be set forth in the applicable Restricted Share Award Agreement and shall apply in addition to any general restrictions that may apply to all holders of Shares.

SECTION 7. TERMS AND CONDITIONS OF OPTIONS.

(a) Stock Option Award Agreement. Each grant of an Option under the Plan shall be evidenced by a Stock Option Award Agreement between the Participant and the Company. Such Option shall be subject to all applicable terms and conditions of the Plan and may be subject to any other terms and conditions which are not inconsistent with the Plan and which the Committee deems appropriate for inclusion in a Stock Option Award Agreement. The Stock Option Award Agreement shall specify whether the Option is an ISO or an NSO. The provisions of the various Stock Option Award Agreements entered into under the Plan need not be identical.

(b) Number of Shares. Each Stock Option Award Agreement shall specify the number of Shares that are subject to the Option and shall provide for the adjustment of such number in accordance with Section 12.

(c) Exercise Price. Each Stock Option Award Agreement shall specify the Exercise Price. The Exercise Price of an ISO shall not be less than 100% of the Fair Market Value of a Share on the date of grant, except as otherwise provided in 4(c), and the Exercise Price of an NSO shall not be less 100% of the Fair Market Value of a Share on the date of grant. Notwithstanding the foregoing, Options may be granted with an Exercise Price of less than 100% of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code. Subject to the foregoing in this Section 7(c), the Exercise Price under any Option shall be determined by the Committee in its sole discretion. The Exercise Price shall be payable in one of the forms described in Section 8.

(d) Withholding Taxes. As a condition to the exercise of an Option, the Participant shall make such arrangements as the Committee may require for the satisfaction of any federal, state, local or foreign withholding tax obligations that may arise in connection with such exercise. The Participant shall also make such arrangements as the Committee may require for the satisfaction of any federal, state, local or foreign withholding tax obligations that may arise in connection with the disposition of Shares acquired by exercising an Option.
(e) **Exercisability and Term.** Each Stock Option Award Agreement shall specify the date when all or any installment of the Option is to become exercisable. The Stock Option Award Agreement shall also specify the term of the Option; provided that the term of an ISO shall in no event exceed 10 years from the date of grant (five years for ISOs granted to Employees described in Section 4(c)). A Stock Option Award Agreement may provide for accelerated exercisability in the event of the Participant’s death, disability, or retirement or other events and may provide for expiration prior to the end of its term in the event of the termination of the Participant’s Service. Options may be awarded in combination with SARs, and such an Award may provide that the Options will not be exercisable unless the related SARs are forfeited. Subject to the foregoing in this Section 7(e), the Committee at its sole discretion shall determine when all or any installment of an Option is to become exercisable and when an Option is to expire.

(f) **Exercise of Options.** Each Stock Option Award Agreement shall set forth the extent to which the Participant shall have the right to exercise the Option following termination of the Participant’s Service with the Company and its Subsidiaries, and the right to exercise the Option of any executors or administrators of the Participant’s estate or any person who has acquired such Option(s) directly from the Participant by bequest or inheritance. Such provisions shall be determined in the sole discretion of the Committee, need not be uniform among all Options issued pursuant to the Plan, and may reflect distinctions based on the reasons for termination of Service.

(g) **Effect of Change in Control.** The Committee may determine, at the time of granting an Option or thereafter, that such Option shall become exercisable as to all or part of the Shares subject to such Option in the event that a Change in Control occurs with respect to the Company.

(h) **No Rights as a Stockholder.** A Participant shall have no rights as a stockholder with respect to any Shares covered by his Option until the date of the issuance of a stock certificate for such Shares. No adjustments shall be made, except as provided in Section 12.

(i) **Modification, Extension and Renewal of Options.** Within the limitations of the Plan, the Committee may modify, extend or renew outstanding options or may accept the cancellation of outstanding options (to the extent not previously exercised), whether or not granted hereunder, in return for the grant of new Options for the same or a different number of Shares and at the same or a different Exercise Price, or in return for the grant of a different Award for the same or a different number of Shares, without stockholder approval. The foregoing notwithstanding, no modification of an Option shall, without the consent of the Participant, materially impair his or her rights or obligations under such Option.

(j) **Restrictions on Transfer of Shares.** Any Shares issued upon exercise of an Option shall be subject to such special forfeiture conditions, rights of repurchase, rights of first refusal and other transfer restrictions as the Committee may determine. Such restrictions shall be set forth in the applicable Stock Option Award Agreement and shall apply in addition to any general restrictions that may apply to all holders of Shares.

(k) **Buyout Provisions.** The Committee may at any time (a) offer to buy out for a payment in cash or cash equivalents an Option previously granted or (b) authorize a Participant to elect to cash out an Option previously granted, in either case at such time and based upon such terms and conditions as the Committee shall establish.

**SECTION 8. PAYMENT FOR SHARES.**

(a) **General Rule.** The entire Exercise Price or Purchase Price of Shares issued under the Plan shall be payable in lawful money of the United States of America at the time when such Shares are purchased, except as provided in Section 8(b) through Section 8(h) below.

(b) **Surrender of Stock.** To the extent that a Stock Option Award Agreement so provides, payment may be made all or in part by surrendering, or attesting to the ownership of, Shares which have already been owned by the Participant or his representative. Such Shares shall be valued at their Fair Market Value on the date when the new Shares are purchased under the Plan. The Participant shall not surrender, or attest to the ownership of, Shares in payment of the Exercise Price if such action would cause the Company to recognize compensation expense (or additional compensation expense) with respect to the Option for financial reporting purposes.

(c) **Services Rendered.** At the discretion of the Committee, Shares may be awarded under the Plan in consideration of services rendered to the Company or a Subsidiary. If Shares are awarded without the payment of a Purchase Price in cash, the Committee shall make a determination (at the time of the Award) of the value of the services rendered by the Participant and the sufficiency of the consideration to meet the requirements of Section 6(b).

(d) **Cashless Exercise.** To the extent that a Stock Option Award Agreement so provides, payment may be made all or in part by delivery (on a form prescribed by the Committee) of an irrevocable direction to a securities broker to sell Shares and to deliver all
or part of the sale proceeds to the Company in payment of the aggregate Exercise Price.

(e) Exercise/Pledge. To the extent that a Stock Option Award Agreement so provides, payment may be made all or in part by delivery (on a form prescribed by the Committee) of an irrevocable direction to a securities broker or lender to pledge Shares, as security for a loan, and to deliver all or part of the loan proceeds to the Company in payment of the aggregate Exercise Price.

(f) Net Exercise. To the extent that a Stock Option Award Agreement so provides, by a “net exercise” arrangement pursuant to which the number of Shares issuable upon exercise of the Option shall be reduced by the largest whole number of Shares having an aggregate Fair Market Value that does not exceed the aggregate exercise price (plus tax withholdings, if applicable) and any remaining balance of the aggregate exercise price (and/or applicable tax withholdings) not satisfied by such reduction in the number of whole Shares to be issued shall be paid by the Optionee in cash other form of payment permitted under the Stock Option Agreement.

(g) Promissory Note. To the extent that a Stock Option Award Agreement or Restricted Share Award Agreement so provides, payment may be made all or in part by delivering (on a form prescribed by the Company) a full-recourse promissory note.

(h) Other Forms of Payment. To the extent that a Stock Option Award Agreement or Restricted Share Award Agreement so provides, payment may be made in any other form that is consistent with applicable laws, regulations and rules.

(i) Limitations under Applicable Law. Notwithstanding anything herein or in a Stock Option Award Agreement or Restricted Share Award Agreement to the contrary, payment may not be made in any form that is unlawful, as determined by the Committee in its sole discretion.

SECTION 9. STOCK APPRECIATION RIGHTS.

(a) SAR Award Agreement. Each grant of a SAR under the Plan shall be evidenced by a SAR Award Agreement between the Participant and the Company. Such SAR shall be subject to all applicable terms of the Plan and may be subject to any other terms that are not inconsistent with the Plan. The provisions of the various SAR Award Agreements entered into under the Plan need not be identical.

(b) Number of Shares. Each SAR Award Agreement shall specify the number of Shares to which the SAR pertains and shall provide for the adjustment of such number in accordance with Section 12.

(c) Exercise Price. Each SAR Award Agreement shall specify the Exercise Price. The Exercise Price of a SAR shall not be less than 100% of the Fair Market Value of a Share on the date of grant. Notwithstanding the foregoing, SARs may be granted with an Exercise Price of less than 100% of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code. Subject to the foregoing in this Section 9(c), the Exercise Price under any SAR shall be determined by the Committee in its sole discretion.

(d) Exercisability and Term. Each SAR Award Agreement shall specify the date when all or any installment of the SAR is to become exercisable. The SAR Award Agreement shall also specify the term of the SAR. A SAR Award Agreement may provide for accelerated exercisability in the event of the Participant’s death, disability or retirement or other events and may provide for expiration prior to the end of its term in the event of the termination of the Participant’s service. SARs may be awarded in combination with Options, and such an Award may provide that the SARs will not be exercisable unless the related Options are forfeited. A SAR may be included in an ISO only at the time of grant but may be included in an NSO at the time of grant or thereafter. A SAR granted under the Plan may provide that it will be exercisable only in the event of a Change in Control.

(e) Effect of Change in Control. The Committee may determine, at the time of granting a SAR or thereafter, that such SAR shall become fully exercisable as to all Common Shares subject to such SAR in the event that a Change in Control occurs with respect to the Company.

(f) Exercise of SARs. Upon exercise of a SAR, the Participant (or any person having the right to exercise the SAR after his or her death) shall receive from the Company (a) Shares, (b) cash or (c) a combination of Shares and cash, as the Committee shall determine. The amount of cash and/or the Fair Market Value of Shares received upon exercise of SARs shall, in the aggregate, be equal to the amount by which the Fair Market Value (on the date of surrender) of the Shares subject to the SARs exceeds the Exercise Price.

(g) Modification or Assumption of SARs. Within the limitations of the Plan, the Committee may modify, extend or assume outstanding SARs or may accept the cancellation of outstanding SARs (whether granted by the Company or by another issuer) in return for the grant of new SARs for the same or a different number of shares and at the same or a different exercise price, or in
return for the grant of a different Award for the same or a different number of Shares, without stockholder approval. The foregoing notwithstanding, no modification of a SAR shall, without the consent of the holder, materially impair his or her rights or obligations under such SAR.

(h) **Buyout Provisions.** The Committee may at any time (a) offer to buy out for a payment in cash or cash equivalents a SAR previously granted, or (b) authorize a Participant to elect to cash out a SAR previously granted, in either case at such time and based upon such terms and conditions as the Committee shall establish.

**SECTION 10. STOCK UNITS.**

(a) **Stock Unit Award Agreement.** Each grant of Stock Units under the Plan shall be evidenced by a Stock Unit Award Agreement between the Participant and the Company. Such Stock Units shall be subject to all applicable terms of the Plan and may be subject to any other terms that are not inconsistent with the Plan. The provisions of the various Stock Unit Award Agreements entered into under the Plan need not be identical.

(b) **Payment for Awards.** To the extent that an Award is granted in the form of Stock Units, no cash consideration shall be required of the Award recipients.

(c) **Vesting Conditions.** Each Award of Stock Units may or may not be subject to vesting. Vesting shall occur, in full or in installments, upon satisfaction of the conditions specified in the Stock Unit Award Agreement. A Stock Unit Award Agreement may provide for accelerated vesting in the event of the Participant’s death, disability or retirement or other events. The Committee may determine, at the time of granting Stock Units or thereafter, that all or part of such Stock Units shall become vested in the event that a Change in Control occurs with respect to the Company.

(d) **Voting and Dividend Rights.** The holders of Stock Units shall have no voting rights. Prior to settlement or forfeiture, any Stock Unit awarded under the Plan may, at the Committee’s discretion, carry with it a right to dividend equivalents. Such right entitles the holder to be credited with an amount equal to all cash dividends paid on one Share while the Stock Unit is outstanding. Dividend equivalents may be converted into additional Stock Units. Settlement of dividend equivalents may be made in the form of cash, in the form of Shares, or in a combination of both. Prior to distribution, any dividend equivalents which are not paid shall be subject to the same conditions and restrictions (including without limitation, any forfeiture conditions) as the Stock Units to which they attach.

(e) **Form and Time of Settlement of Stock Units.** Settlement of vested Stock Units may be made in the form of (a) cash, (b) Shares or (c) any combination of both, as determined by the Committee. The actual number of Stock Units eligible for settlement may be larger or smaller than the number included in the original Award, based on predetermined performance factors. Methods of converting Stock Units into cash may include (without limitation) a method based on the average Fair Market Value of Shares over a series of trading days. A Stock Unit Award Agreement may provide that vested Stock Units may be settled in a lump sum or in installments. A Stock Unit Award Agreement may provide that the distribution may occur or commence when all vesting conditions applicable to the Stock Units have been satisfied or have lapsed, or it may be deferred to any later date, subject to compliance with Section 409A of the Code. The amount of a deferred distribution may be increased by an interest factor or by dividend equivalents. Until an Award of Stock Units is settled, the number of such Stock Units shall be subject to adjustment pursuant to Section 12.

(f) **Death of Participant.** Any Stock Unit Award that becomes payable after the Participant’s death shall be distributed to the Participant’s beneficiary or beneficiaries. Each recipient of a Stock Unit Award under the Plan shall designate one or more beneficiaries for this purpose by filing the prescribed form with the Company. A beneficiary designation may be changed by filing the prescribed form with the Company at any time before the Participant’s death. If no beneficiary was designated or if no designated beneficiary survives the Participant, then any Stock Units Award that becomes payable after the Participant’s death shall be distributed to the Participant’s estate.

(g) **Creditors’ Rights.** A holder of Stock Units shall have no rights other than those of a general creditor of the Company. Stock Units represent an unfunded and unsecured obligation of the Company, subject to the terms and conditions of the applicable Stock Unit Award Agreement.

**SECTION 11. CASH-BASED AWARDS**

The Committee may, in its sole discretion, grant Cash-Based Awards to any Participant in such number or amount and upon such terms, and subject to such conditions, as the Committee shall determine at the time of grant and specify in an applicable Award Agreement. The Committee shall determine the maximum duration of the Cash-Based Award, the amount of cash which may be payable pursuant to the Cash-Based Award, the conditions upon which the Cash-Based Award shall become vested or payable, and such other provisions as the Committee shall determine. Each Cash-Based Award shall specify a cash-denominated payment
amount, formula or payment ranges as determined by the Committee. Payment, if any, with respect to a Cash-Based Award shall be made in accordance with the terms of the Award and may be made in cash or in shares of Stock, as the Committee determines.

SECTION 12. ADJUSTMENT OF SHARES.

(a) Adjustments. In the event of a subdivision of the outstanding Stock, a declaration of a dividend payable in Shares, a declaration of a dividend payable in a form other than Shares in an amount that has a material effect on the price of Shares, a combination or consolidation of the outstanding Stock (by reclassification or otherwise) into a lesser number of Shares, a recapitalization, a spin-off or a similar occurrence, the Committee shall make appropriate and equitable adjustments in:

(i) The number of Shares available for future Awards under Section 5;
(ii) The limitations set forth in Sections 5(a) and (b) and Section 19;
(iii) The number of Shares covered by each outstanding Award; and
(iv) The Exercise Price under each outstanding Option and SAR.

(b) Dissolution or Liquidation. To the extent not previously exercised or settled, Options, SARs and Stock Units shall terminate immediately prior to the dissolution or liquidation of the Company.

(c) Reorganizations. In the event that the Company is a party to a merger or other reorganization, outstanding Awards shall be subject to the agreement of merger or reorganization. Subject to compliance with Section 409A of the Code, such agreement shall provide for:

(i) The continuation of the outstanding Awards by the Company, if the Company is a surviving corporation;
(ii) The assumption of the outstanding Awards by the surviving corporation or its parent or subsidiary;
(iii) The substitution by the surviving corporation or its parent or subsidiary of its own awards for the outstanding Awards;
(iv) Immediate vesting, exercisability and settlement of outstanding Awards followed by the cancellation of such Awards upon or immediately prior to the effectiveness of such transaction; or
(v) Settlement of the intrinsic value of the outstanding Awards (whether or not then vested or exercisable) in cash or cash equivalents or equity (including cash or equity subject to deferred vesting and delivery consistent with the vesting restrictions applicable to such Awards or the underlying Shares) followed by the cancellation of such Awards (and, for the avoidance of doubt, if as of the date of the occurrence of the transaction the Committee determines in good faith that no amount would have been attained upon the exercise of such Award or realization of the Participant’s rights, then such Award may be terminated by the Company without payment); in each case without the Participant’s consent. Any acceleration of payment of an amount that is subject to section 409A of the Code will be delayed, if necessary, until the earliest time that such payment would be permissible under Section 409A without triggering any additional taxes applicable under Section 409A.

The Company will have no obligation to treat all Awards, all Awards held by a Participant, or all Awards of the same type, similarly.

(d) Reservation of Rights. Except as provided in this Section 12, a Participant shall have no rights by reason of any subdivision or consolidation of shares of stock of any class, the payment of any dividend or any other increase or decrease in the number of shares of stock of any class. Any issue by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall not affect, and no adjustment by reason thereof shall be made with respect to, the number or Exercise Price of Shares subject to an Award. The grant of an Award pursuant to the Plan shall not affect in any way the right or power of the Company to make adjustments, reclassifications, reorganizations or changes of its capital or business structure, to merge or consolidate or to dissolve, liquidate, sell or transfer all or any part of its business or assets. In the event of any change affecting the Shares or the Exercise Price of Shares subject to an Award, including a merger or other reorganization, for reasons of administrative convenience, the Company in its sole discretion may refuse to permit the exercise of any Award during a period of up to thirty (30) days prior to the occurrence of such event.

SECTION 13. DEFERRAL OF AWARDS.
(a) **Committee Powers.** Subject to compliance with Section 409A of the Code, the Committee (in its sole discretion) may permit or require a Participant to:

(i) Have cash that otherwise would be paid to such Participant as a result of the exercise of a SAR or the settlement of Stock Units credited to a deferred compensation account established for such Participant by the Committee as an entry on the Company’s books;

(ii) Have Shares that otherwise would be delivered to such Participant as a result of the exercise of an Option or SAR converted into an equal number of Stock Units; or

(iii) Have Shares that otherwise would be delivered to such Participant as a result of the exercise of an Option or SAR or the settlement of Stock Units converted into amounts credited to a deferred compensation account established for such Participant by the Committee as an entry on the Company’s books. Such amounts shall be determined by reference to the Fair Market Value of such Shares as of the date when they otherwise would have been delivered to such Participant.

(b) **General Rules.** A deferred compensation account established under this Section 13 may be credited with interest or other forms of investment return, as determined by the Committee. A Participant for whom such an account is established shall have no rights other than those of a general creditor of the Company. Such an account shall represent an unfunded and unsecured obligation of the Company and shall be subject to the terms and conditions of the applicable agreement between such Participant and the Company. If the deferral or conversion of Awards is permitted or required, the Committee (in its sole discretion) may establish rules, procedures and forms pertaining to such Awards, including (without limitation) the settlement of deferred compensation accounts established under this Section 13.

**SECTION 14. AWARDS UNDER OTHER PLANS.**

The Company may grant awards under other plans or programs. Such awards may be settled in the form of Shares issued under this Plan. Such Shares shall be treated for all purposes under the Plan like Shares issued in settlement of Stock Units and shall, when issued, reduce the number of Shares available under Section 5.

**SECTION 15. INDUCEMENT AWARDS POOL.**

(a) **Inducement Share Reserve.** An additional pool of Shares (the “Inducement Shares”) are reserved under this Plan to be used exclusively for the grant of Awards in compliance with New York Stock Exchange Rule 303A.08 (the “Inducement Awards”). The pool of Inducement Shares shall not exceed in the aggregate (a) 475,000 Shares (“Share-based Inducement Awards”), plus (b) $95,000,000, with the specific number of Shares within such $95,000,000 limit based on (i) the Fair Market Value of a Share on the vesting date of the Inducement Shares or, if so provided in the Award Agreement, the volume-weighted average trading price of a Share for up to 60 days immediately preceding such vesting date, (ii) the Fair Market Value of a Share on the date of grant of an Inducement Award, or (iii) any other value of a Share in the applicable agreement setting forth an Inducement Award including but not limited to an asset acquisition agreement, a stock acquisition agreement, a merger agreement, or any similar agreement (“Value-based Inducement Awards”). The number of Inducement Shares shall be subject to adjustment pursuant to Section 12, as applicable. For purposes of clarity, the Inducement Shares that may be awarded are in addition to and shall not reduce the number of Shares reserved under Section 5(a) for Awards other than Inducement Awards. The Shares underlying any Inducement Awards that are forfeited, canceled, held back upon exercise of an Inducement Award or settlement of an Inducement Award to cover the exercise price or tax withholding, reacquired by the Company prior to vesting, settled without the issuance of Shares or otherwise terminated (other than by exercise) shall be added back to the number of Inducement Shares available for grant under this Section 15 based on the number of Shares forfeited, canceled, held back, reacquired, settled without the issuance of Shares or otherwise terminated (other than by exercise) for Share-based Inducement Awards and based on vesting date Fair Market Value of the Inducement Shares returning to the Plan or other valuation method set forth in the Award Agreement for Value-based Inducement Awards, but shall not affect the number of Shares available for Awards under Section 5(a).

(b) **Inducement Award Rules.** Notwithstanding anything to the contrary in this Plan, an Inducement Award may be granted only to an Employee as an inducement material to the individual’s entering into employment with the Company or an Affiliate within the meaning of New York Stock Exchange Rule 303A.08 and only if such individual has not previously been an Employee or has experienced a bona fide period of interruption of employment with the Company and its Affiliates prior to grant of the Inducement Award. In addition, notwithstanding any other provision of the Plan to the contrary, all such Inducement Awards must be granted by the Committee. No Inducement Award may be an ISO.

**SECTION 16. PAYMENT OF DIRECTOR’S FEES IN SECURITIES.**
(a) **Effective Date.** No provision of this Section 16 shall be effective unless and until the Board has determined to implement such provision.

(b) **Elections to Receive NSOs, SARs, Restricted Shares or Stock Units.** An Outside Director may elect to receive his or her annual retainer payments and/or meeting fees from the Company in the form of cash, NSOs, SARs, Restricted Shares or Stock Units, or a combination thereof, as determined by the Board. Alternatively, the Board may mandate payment in any of such alternative forms. Such NSOs, SARs, Restricted Shares and Stock Units shall be issued under the Plan. An election under this Section 16 shall be filed with the Company on the prescribed form.

(c) **Number and Terms of NSOs, SARs, Restricted Shares or Stock Units.** The number of NSOs, SARs, Restricted Shares or Stock Units to be granted to Outside Directors in lieu of annual retainers and meeting fees that would otherwise be paid in cash shall be calculated in a manner determined by the Board. The terms of such NSOs, SARs, Restricted Shares or Stock Units shall also be determined by the Board.

**SECTION 17. LEGAL AND REGULATORY REQUIREMENTS.**

Shares shall not be issued under the Plan unless the issuance and delivery of such Shares complies with (or is exempt from) all applicable requirements of law, including (without limitation) the Securities Act of 1933, as amended, the rules and regulations promulgated thereunder, state securities laws and regulations and the regulations of any stock exchange on which the Company’s securities may then be listed, and the Company has obtained the approval or favorable ruling from any governmental agency which the Company determines is necessary or advisable. The Company shall not be liable to a Participant or other persons as to: (a) the non-issuance or sale of Shares as to which the Company has not obtained from any regulatory body having jurisdiction the authority deemed by the Company’s counsel to be necessary to the lawful issuance and sale of any Shares under the Plan; and (b) any tax consequences expected, but not realized, by any Participant or other person due to the receipt, exercise or settlement of any Award granted under the Plan.

**SECTION 18. TAXES.**

(a) **Withholding Taxes.** To the extent required by applicable federal, state, local or foreign law, a Participant or his or her successor shall make arrangements satisfactory to the Company for the satisfaction of any withholding tax obligations that arise in connection with the Plan. The Company shall not be required to issue any Shares or make any cash payment under the Plan until such obligations are satisfied.

(b) **Share Withholding.** The Committee may permit a Participant to satisfy all or part of his or her withholding or income tax obligations by having the Company withhold all or a portion of any Shares that otherwise would be issued to him or her or by surrendering all or a portion of any Shares that he or she previously acquired. Such Shares shall be valued at their Fair Market Value on the date when taxes otherwise would be withheld in cash. In no event may a Participant have Shares withheld that would otherwise be issued to him or her in excess of the number necessary to satisfy the minimum legally required tax withholding.

(c) **Section 409A.** Each Award that provides for “nonqualified deferred compensation” within the meaning of Section 409A of the Code shall be subject to such additional rules and requirements as specified by the Committee from time to time in order to comply with Section 409A. If any amount under such an Award is payable upon a “separation from service” (within the meaning of Section 409A) to a Participant who is then considered a “specified employee” (within the meaning of Section 409A), then no such payment shall be made prior to the date that is the earlier of (i) six months and one day after the Participant’s separation from service, or (ii) the Participant’s death, but only to the extent such delay is necessary to prevent such payment from being subject to interest, penalties and/or additional tax imposed pursuant to Section 409A. In addition, the settlement of any such Award may not be accelerated except to the extent permitted by Section 409A.

**SECTION 19. TRANSFERABILITY.**

Unless the agreement evidencing an Award (or an amendment thereto authorized by the Committee) expressly provides otherwise, no Award granted under this Plan, nor any interest in such Award, may be sold, assigned, conveyed, gifted, pledged, hypothecated or otherwise transferred in any manner (prior to the vesting and lapse of any and all restrictions applicable to Shares issued under such Award), other than by will or the laws of descent and distribution; provided, however, that an ISO may be transferred or assigned only to the extent consistent with Section 422 of the Code. Any purported assignment, transfer or encumbrance in violation of this Section 19 shall be void and unenforceable against the Company.

**SECTION 20. PERFORMANCE BASED AWARDS.**

The number of Shares or other benefits granted, issued, retainable and/or vested under an Award may be made subject to the
attainment of performance goals. The Committee may utilize any performance criteria selected by it in its sole discretion to establish performance goals; provided, however, that in the case of any Performance Based Award, the following conditions shall apply:

(i) The amount potentially available under a Performance Based Award shall be subject to the attainment of pre-established, objective performance goals relating to a specified period of service including but not limited to any of the following performance criteria: (a) cash flow, (b) earnings per share, (c) earnings before interest, taxes and amortization, (d) return on equity, (e) total stockholder return, (f) share price performance, (g) return on capital, (h) return on assets or net assets, (i) revenue, (j) income or net income, (k) operating income or net operating income, (l) operating profit or net operating profit, (m) operating margin or profit margin, (n) return on operating revenue, (o) return on invested capital, (p) market segment shares, (q) costs, (r) expenses, (s) initiation or completion of research activities, (t) initiation or completion of development programs, (u) other milestones with respect to research activities or development programs, (v) regulatory body approval, (w) implementation or completion of critical projects, (x) commercial milestones or (y) other milestones with respect to the growth of the Company’s business or the development or commercialization of any product or service (“Qualifying Performance Criteria”), any of which may be measured either individually, alternatively or in any combination, applied to either the Company as a whole or to a business unit or Subsidiary, either individually, alternatively or in any combination, and measured either annually or cumulatively over a period of years, on an absolute basis or relative to a pre-established target, to previous years’ results or to a designated comparison group or index, in each case as specified by the Committee in the Award;

(ii) The Committee may appropriately adjust the method of evaluating performance under a Qualifying Performance Criteria for a performance period as follows: (i) to exclude asset write-downs, (ii) to exclude litigation or claim judgments or settlements, (iii) to exclude the effect of changes in tax law, accounting principles or other such laws or provisions affecting reported results, (iv) to exclude accruals for reorganization and restructuring programs, (v) to exclude any extraordinary nonrecurring items as determined under generally accepted accounting principles and/or described in managements’ discussion and analysis of financial condition and results of operations appearing in the Company’s annual report to stockholders for the applicable year, (vi) to exclude the dilutive effects of acquisitions or joint ventures, (vii) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a performance period following such divestiture, (viii) to exclude the effect of any change in the outstanding shares of common stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends, (ix) to exclude the effects of stock based compensation and the award of bonuses under the Company’s bonus plans; and (x) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles;

(iii) The Committee shall establish the applicable performance goals in writing and an objective method for determining the Award earned by a Participant if the goals are attained, while the outcome is substantially uncertain, and shall determine and certify in writing, for each Participant, the extent to which the performance goals have been met prior to payment or vesting of the Award; and

(iv) The maximum aggregate number of Shares that may be subject to Performance Based Awards granted to a Participant in any calendar year (other than Inducement Awards) is 2,000,000 Shares, and no more than two times this amount in the first year of employment (subject to adjustment under Section 12), and the maximum aggregate amount of cash that may be payable to a Participant under Performance Based Awards granted to a Participant in any calendar year that are Cash-Based Awards is $10,000,000.

SECTION 21. NO EMPLOYMENT RIGHTS.

No provision of the Plan, nor any Award granted under the Plan, shall be construed to give any person any right to become, to be treated as, or to remain an Employee or Consultant. The Company and its Subsidiaries reserve the right to terminate any person’s Service at any time and for any reason, with or without notice.

SECTION 22. DURATION AND AMENDMENTS.

(a) Term of the Plan. The Plan, as set forth herein, shall come into existence on the date of its adoption by the Board of Directors; provided, however, that no Award may be granted hereunder prior to the Effective Date. The Board of Directors may suspend or terminate the Plan at any time. No ISOs may be granted after the tenth anniversary of the earlier of (i) the date the Plan is adopted by the Board of Directors, or (ii) the date the Plan is approved the stockholders of the Company.
(b) **Right to Amend the Plan.** The Board of Directors may amend the Plan at any time and from time to time. Rights and obligations under any Award granted before amendment of the Plan shall not be materially impaired by such amendment, except with consent of the Participant. An amendment of the Plan shall be subject to the approval of the Company’s stockholders only to the extent required by applicable laws, regulations or rules.

(c) **Effect of Termination.** No Awards shall be granted under the Plan after the termination thereof. The termination of the Plan shall not affect Awards previously granted under the Plan.

**SECTION 23. EXECUTION.**

To record the amendment and restatement of the Plan by the Board of Directors, the Company has caused its authorized officer to execute the same.

**INVITAE CORPORATION**

By: /s/ Thomas Brida
Name: Thomas Brida
Title: General Counsel and Secretary
I, Sean E. George, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Invitae Corporation for the period ended June 30, 2020;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a—15(e) and 15d—15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Dated: August 4, 2020

/s/ Sean E. George, Ph.D.

Sean E. George, Ph.D.
Chief Executive Officer and Director
(Principal Executive Officer)
I, Shelly D. Guyer, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Invitae Corporation for the period ended June 30, 2020;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a—15(e) and 15d—15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Dated: August 4, 2020

/s/ Shelly D. Guyer
Shelly D. Guyer
Chief Financial Officer
(Principal Financial Officer)
CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report of Invitae Corporation (the "Company") on Form 10-Q for the period ended June 30, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned officer of the Company certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to such officer's knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 4, 2020

/s/ Sean E. George, Ph.D.

Sean E. George, Ph.D.

Chief Executive Officer and Director
(Principal Executive Officer)
CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report of Invitae Corporation (the “Company”) on Form 10-Q for the period ended June 30, 2020, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned officer of the Company certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to such officer’s knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 4, 2020

/s/ Shelly D. Guyer
Shelly D. Guyer
Chief Financial Officer
(Principal Financial Officer)