
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

**November 21, 2018
Date of Report (Date of earliest event reported)**

Tocagen Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-38052
(Commission
File Number)

26-1243872
(IRS Employer
Identification No.)

4242 Campus Point Court, Suite 500
San Diego, California
(Address of principal executive offices)

92121
(Zip Code)

Registrant's telephone number, including area code: (858) 412-8400

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligations of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 1.01 Entry into a Material Definitive Agreement.

On November 21, 2018, Tocagen Inc. (the “Company”) entered into an Equity Distribution Agreement (the “Agreement”) with Citigroup Global Markets Inc. (“Citigroup”), pursuant to which the Company may sell and issue shares of its common stock having an aggregate offering price of up to \$30,000,000 (the “Shares”) from time to time through Citigroup, as the Company’s sales agent (the “ATM Offering”). The Company has no obligation to sell any of the Shares, and may at any time suspend offers under the Agreement or terminate the Agreement.

Sales of the Shares, if any, under the Agreement may be made in transactions that are deemed to be “at-the-market” equity offerings as defined in Rule 415 under the Securities Act of 1933, as amended, including sales made by means of ordinary brokers’ transactions, including on The Nasdaq Stock Market. Subject to the terms and conditions of the Agreement, Citigroup will use its reasonable efforts to sell the Shares from time to time based upon the Company’s instructions (including any price, time or size limits or other parameters or conditions the Company may impose). The Company will pay Citigroup a commission of up to 3.0% of the gross sales price of any Shares sold under the Agreement. The Company has also provided Citigroup with customary indemnification rights and has agreed to reimburse Citigroup for certain specified expenses up to \$50,000.

The Shares will be offered and sold pursuant to the Company’s shelf registration statement on Form S-3 (File No. 333-224880). On November 21, 2018, the Company filed a prospectus supplement relating to the ATM Offering with the Securities and Exchange Commission.

Under the terms of the Agreement, the Company may also sell Shares to Citigroup as principal for its own account at a price agreed upon at the time of the sale, subject to the Company entering into a separate terms agreement with Citigroup for any such sale.

The description of the Agreement does not purport to be complete and is qualified in its entirety by reference to the Agreement, a copy of which is filed as Exhibit 10.1 to this Current Report on Form 8-K.

The legal opinion of Cooley LLP relating to the shares of common stock being offered pursuant to the Agreement is filed as Exhibit 5.1 to this Current Report on Form 8-K.

This Current Report on Form 8-K shall not constitute an offer to sell or the solicitation of an offer to buy the securities discussed herein, nor shall there be any offer, solicitation, or sale of the securities in any state in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit Number</u>	<u>Description</u>
5.1	Opinion of Cooley LLP
10.1	Equity Distribution Agreement, dated November 21, 2018, by and between Tocagen Inc. and Citigroup Global Markets Inc.
23.1	Consent of Cooley LLP (included in Exhibit 5.1)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: November 21, 2018

Tocagen Inc.

By: /s/ Mark Foletta

Mark Foletta

Executive Vice President, Chief Financial Officer



Karen E. Anderson
+1 858 550 6088
kanderson@cooley.com

November 21, 2018

Tocagen Inc.
4242 Campus Point Court, Suite 500
San Diego, CA 92121

Ladies and Gentlemen:

We have acted as counsel to Tocagen Inc., a Delaware corporation (the “**Company**”), with respect to certain matters in connection with the offering by the Company of \$30,000,000 of shares of the Company’s common stock, par value \$0.001 per share (the “**Shares**”), pursuant to the Registration Statement on Form S-3 (File No. 333-224880) (the “**Registration Statement**”), filed with the Securities and Exchange Commission (the “**Commission**”) under the Securities Act of 1933, as amended (the “**Act**”), the related prospectus dated May 23, 2018 included within the Registration Statement (the “**Base Prospectus**”), and the prospectus supplement dated November 21, 2018, filed with the Commission pursuant to Rule 424(b) of the Rules and Regulations of the Act (together with the Base Prospectus, the “**Prospectus**”). The Shares are to be sold by the Company in accordance with that certain Equity Distribution Agreement, dated November 21, 2018, between the Company and Citigroup Global Markets Inc. (the “**Agreement**”), as described in the Prospectus.

In connection with this opinion, we have examined and relied upon the Registration Statement, the Prospectus, the Agreement, the Company’s Amended and Restated Certificate of Incorporation and its Amended and Restated Bylaws, each as currently in effect, and such other documents, records, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to render the opinion expressed below. In rendering this opinion, we have assumed the genuineness and authenticity of all signatures on original documents; the genuineness and authenticity of all documents submitted to us as originals; the conformity to originals of all documents submitted to us as copies; and the accuracy, completeness and authenticity of certificates of public officials. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not sought independently to verify such matters.

We have assumed that each sale of the Shares will be duly authorized by the Board of Directors of the Company, a duly authorized committee thereof or a person or body pursuant to an authorization granted in accordance with Section 152 of the General Corporation Law of the State of Delaware (the “**DGCL**”) and that no more than 30,000,000 Shares will be sold under the Agreement. We express no opinion to the extent that future issuances of securities of the Company and/or anti-dilution adjustments to outstanding securities of the Company cause the number of shares of the Company’s common stock outstanding or issuable upon conversion or exercise of outstanding securities of the Company to exceed the number of Shares then issuable under the Agreement.

Our opinion herein is expressed solely with respect to the DGCL. Our opinion is based on these laws as in effect on the date hereof, and we disclaim any obligation to advise you of facts, circumstances, events or developments which hereafter may be brought to our attention and which may alter, affect or modify the opinion expressed herein. We express no opinion as to whether the laws of any particular jurisdiction other than those identified above are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or state law, rule or regulation relating to securities, or to the sale or issuance thereof.

Cooley LLP 4401 Eastgate Mall San Diego, CA 92121
t: (858) 550-6000 f: (858) 550-6420 cooley.com



Tocagen
November 21, 2018
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On the basis of the foregoing, and in reliance thereon, and subject to the qualifications herein stated, we are of the opinion that the Shares, when sold and issued against payment therefor in accordance with the Agreement, the Registration Statement and the Prospectus, will be validly issued, fully paid and nonassessable.

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus and to the filing of this opinion as an exhibit to a Current Report on Form 8-K to be filed with the Commission for incorporation by reference into the Registration Statement.

Sincerely,

Cooley LLP

By: /s/ Karen E. Anderson
Karen E. Anderson

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TOCAGEN INC.

\$30,000,000.00
Common Stock
(\$0.001 par value)

Equity Distribution Agreement

November 21, 2018

Citigroup Global Markets Inc.
388 Greenwich Street
New York, New York, 10013

Ladies and Gentlemen:

Tocagen Inc., a corporation organized under the laws of Delaware (the “Company”), confirms its agreement (this “Agreement”) with Citigroup Global Markets Inc. (the “Manager”) as follows:

1. Description of Shares. The Company proposes to issue and sell through or to the Manager, as sales agent and/or principal, shares of the Company’s common stock, \$0.001 par value (“Common Stock”), having an aggregate gross sales price of up to \$30,000,000.00 (the “Shares”), from time to time during the term of this Agreement and on the terms set forth in Section 3 of this Agreement. For purposes of selling the Shares through the Manager, the Company hereby appoints the Manager as exclusive agent of the Company for the purpose of soliciting purchases of the Shares from the Company pursuant to this Agreement and the Manager agrees to use its reasonable efforts to solicit purchases of the Shares on the terms and subject to the conditions stated herein. The Company agrees that whenever it determines to sell the Shares directly to the Manager as principal, it will enter into a separate agreement (each, a “Terms Agreement”) in substantially the form of Annex I hereto, relating to such sale in accordance with Section 3 of this Agreement. Certain terms used herein are defined in Section 19 hereof.

2. Representations and Warranties. The Company represents and warrants to, and agrees with, the Manager at the Execution Time and on each such time the following representations and warranties are repeated or deemed to be made pursuant to this Agreement, as set forth below. In the event that the Company does not have any subsidiaries, then all references herein to “subsidiaries” or “a subsidiary” of the Company shall be disregarded, *mutatis mutandis*. In the event that the Company only has one subsidiary, then all references herein to “subsidiaries” of the Company shall be deemed to refer to such one subsidiary of the Company, *mutatis mutandis*.

(a) The Company meets the requirements for use of Form S-3 under the Securities Act and has prepared and filed with the Commission a registration statement

(File Number 333-224880) on Form S-3, including a related Base Prospectus, for registration under the Securities Act of the offering and sale of the Shares. Such Registration Statement, including any amendments thereto filed prior to the Execution Time or prior to any such time this representation is repeated or deemed to be made, has become effective. The Company has filed or will file with the Commission the Prospectus Supplement relating to the Shares in accordance with Rule 424(b). As filed, the Prospectus contains all information required by the Securities Act and the rules thereunder, and, except to the extent the Manager shall agree in writing to a modification, shall be in all substantive respects in the form furnished to the Manager prior to the Execution Time or prior to any such time this representation is repeated or deemed to be made. The Registration Statement, at the Execution Time, each such time this representation is repeated or deemed to be made, and at all times during which a prospectus is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 or any similar rule) in connection with any offer or sale of Shares, meets the requirements set forth in Rule 415(a)(1)(x). The initial Effective Date of the Registration Statement was not earlier than the date three years before the Execution Time. Any reference herein to the Registration Statement, the Base Prospectus, the Prospectus Supplement, any Interim Prospectus Supplement or the Prospectus shall be deemed to refer to and include the documents incorporated by reference therein pursuant to Item 12 of Form S-3 which were filed under the Exchange Act on or before the Effective Date of the Registration Statement or the issue date of the Base Prospectus, the Prospectus Supplement, any Interim Prospectus Supplement or the Prospectus, as the case may be; and any reference herein to the terms “amend,” “amendment” or “supplement” with respect to the Registration Statement, the Base Prospectus, the Prospectus Supplement, any Interim Prospectus Supplement or the Prospectus shall be deemed to refer to and include the filing of any document under the Exchange Act after the Effective Date of the Registration Statement or the issue date of the Base Prospectus, the Prospectus Supplement, any Interim Prospectus Supplement or the Prospectus, as the case may be, deemed to be incorporated therein by reference.

(b) To the extent that the Registration Statement is not available for sales of the Shares as contemplated by this Agreement, the Company shall, before requesting the sale of such Shares pursuant to this Agreement, file a new registration statement with respect to any additional shares of Common Stock necessary to complete such sales of the Shares and shall cause such registration statement to become effective as promptly as practicable. After the effectiveness of any such registration statement, all references to “Registration Statement” included in this Agreement shall be deemed to include such new registration statement, including all documents incorporated by reference therein pursuant to Item 12 of Form S-3, and all references to “Base Prospectus” included in this Agreement shall be deemed to include the final form of prospectus, including all documents incorporated therein by reference, included in any such registration statement at the time such registration statement became effective.

(c) On each Effective Date, at the Execution Time, at each Applicable Time, at each Settlement Date (as defined in Section 3(a)) and at all times during which a prospectus is required by the Securities Act to be delivered (whether physically or through compliance

with Rule 172 or any similar rule) in connection with any offer or sale of Shares, the Registration Statement complied and will comply in all material respects with the applicable requirements of the Securities Act and the Exchange Act and the respective rules thereunder and did not and will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading; and on the date of any filing pursuant to Rule 424(b), at the Execution Time, at each Applicable Time, on each Settlement Date and at all times during which a prospectus is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 or any similar rule) in connection with any offer or sale of Shares, the Prospectus (together with any supplement thereto) complied and will comply in all material respects with the applicable requirements of the Securities Act and the Exchange Act and the respective rules thereunder and did not and will not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no representations or warranties as to the information contained in or omitted from the Registration Statement or the Prospectus (or any supplement thereto) in reliance upon and in conformity with information furnished in writing to the Company by the Manager specifically for inclusion in the Registration Statement or the Prospectus (or any supplement thereto), it being understood and agreed that the only such information furnished by or on behalf of the Manager consists of the information described as such in Section 7(a) hereof.

(d) (i) At the earliest time after the filing of the Registration Statement that the Company or another offering participant made a bona fide offer (within the meaning of Rule 164(h)(2)) of the Shares and (ii) as of the Execution Time and on each such time this representation is repeated or deemed to be made (with such date being used as the determination date for purposes of this clause (ii)), the Company was not and is not an Ineligible Issuer (as defined in Rule 405), without taking account of any determination by the Commission pursuant to Rule 405 that it is not necessary that the Company be considered an Ineligible Issuer.

(e) From the time of filing of the Registration Statement through the date hereof, the Company has been and is an “emerging growth company,” as defined in Section 2(a) of the Securities Act.

(f) Each Issuer Free Writing Prospectus does not include any information that conflicts with the information contained in the Registration Statement, including any document incorporated therein by reference and any prospectus supplement deemed to be a part thereof that has not been superseded or modified. The foregoing sentence does not apply to statements in or omissions from any Issuer Free Writing Prospectus based upon and in conformity with written information furnished to the Company by the Manager specifically for use therein.

(g) The Registration Statement is not the subject of a pending proceeding or examination under Section 8(d) or 8(e) of the Securities Act, and the Company is not the subject of a pending proceeding under Section 8A of the Securities Act in connection with the offering of the Shares.

(h) The Common Stock is an “actively-traded security” exempted from the requirements of Rule 101 of Regulation M under the Exchange Act by subsection (c)(1) of such rule.

(i) The Company has not entered into any other sales agency agreements or other similar arrangements with any agent or any other representative in respect of at the market offerings of the Shares in accordance with Rule 415(a)(4) of the Securities Act.

(j) The interactive data in the eXtensible Business Reporting Language included as an exhibit to the Registration Statement or the documents incorporated by reference therein fairly presents the information called for in all material respects and has been prepared in accordance with the Commission’s rules and guidelines applicable thereto.

(k) The financial statements of the Company (including all notes and schedules thereto) included or incorporated by reference in the Registration Statement and the Prospectus, present fairly, in all material respects, the financial position of the Company and its consolidated subsidiaries at the dates indicated and the statement of operations, stockholders’ equity and cash flows of the Company and its consolidated subsidiaries for the periods specified; and such financial statements and related schedules and notes thereto, and the unaudited financial information filed with the Commission as part of the Registration Statement, have been prepared in conformity with generally accepted accounting principles, consistently applied throughout the periods involved (provided that non-year-end financial statements are subject to normal recurring year-end audit adjustments that are not expected to be material in the aggregate and do not contain all footnotes required by generally accepted accounting principles); and the supporting schedules included or incorporated by reference in the Registration Statement present fairly the information required to be stated therein. The selected financial data included in the Prospectus present fairly, in all material respects, the information shown therein as at the respective dates and for the respective periods specified and have been presented on a basis consistent with the consolidated financial statements set forth in the Prospectus and other financial information.

(l) There has not occurred any material adverse change in the condition, financial or otherwise, or in the earnings, business or operations or prospects of the Company, from that set forth in the Prospectus.

(m) Ernst & Young LLP (the “Accountants”), whose reports are filed with the Commission as a part of the Registration Statement, is and, during the periods covered by its reports, was an independent registered public accounting firm as required by the Securities Act.

(n) The Company and each of its subsidiaries is duly organized, validly existing and in good standing under the laws of their respective jurisdictions of incorporation or

organization. The Company and each of its subsidiaries is duly qualified to do business and is in good standing as a foreign corporation in each jurisdiction in which the nature of the business conducted by it or location of the assets or properties owned, leased or licensed by it requires such qualification, except for such jurisdictions where the failure to so qualify or be in good standing, individually or in the aggregate, would not reasonably be expected to have a material adverse effect on the assets, properties, condition, financial or otherwise, or in the results of operations or business affairs or business prospects of the Company and its subsidiaries considered as a whole (a “Material Adverse Effect”); and to the Company’s knowledge, no proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing, or seeking to revoke, limit or curtail, such power and authority or qualification.

(o) Except as set forth in the Prospectus, the Company and each of its subsidiaries has all requisite corporate power and authority, and all necessary authorizations, exemptions, approvals, consents, orders, licenses, registrations, certificates and permits of and from all governmental or regulatory bodies or any other person or entity (collectively, the “Permits”), to own, lease and license its assets and properties and conduct its business, all of which are valid and in full force and effect, except where the lack of such Permits, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect. The Company and each of its subsidiaries has fulfilled and performed in all material respects all of its material obligations with respect to such Permits and, to the Company’s knowledge, no event has occurred that allows, or after notice or lapse of time would allow, revocation or termination thereof or results in any other material impairment of the rights of the Company thereunder. Except as may be required under the Securities Act and state and foreign Blue Sky laws, no other Permits are required to enter into, deliver and perform this Agreement and to issue and sell the Shares. All of the descriptions in the Registration Statement and the Prospectus of the legal and governmental procedures and requirements of the United States Food and Drug Administration (the “FDA”) or any foreign, state or local governmental body exercising comparable authority are accurate in all material respects.

(p) Except as set forth in the Prospectus, the Company owns or has valid, binding and enforceable licenses or other rights under the patents, patent applications, licenses, inventions, copyrights, know how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks, trade names or other intellectual property (collectively, “Intellectual Property”) reasonably necessary for, or used in the conduct, or the proposed conduct, of the business of the Company in the manner described in the Registration Statement and the Prospectus; the patents, trademarks, and copyrights, if any, included within the Intellectual Property owned or licensed by the Company (the “Company Intellectual Property”) are valid, enforceable, and subsisting; other than as disclosed in the Registration Statement and the Prospectus, (i) the Company is not obligated to pay a material royalty, grant a license to, or provide other material consideration to any third party in connection with the Company Intellectual Property, (ii) the Company has not received any notice of any claim of infringement, misappropriation or conflict with any asserted rights of others with respect to any of the Company’s product candidates, services,

processes or the Company Intellectual Property, other than those that, singly or in the aggregate, would not reasonably be expected to result in a Material Adverse Effect, (iii) to the knowledge of the Company, neither the sale nor use of any of the discoveries, inventions, product candidates, services or processes of the Company referred to in the Registration Statement or the Prospectus do or will, to the knowledge of the Company, infringe, misappropriate or violate any right or valid patent claim of any third party, (iv) none of the technology employed by the Company has been obtained or is being used by the Company in material violation of any contractual obligation binding on the Company or, to the Company's knowledge, upon any of its officers, directors or employees or otherwise in violation of the rights of any persons, (v) each person who is or was an employee or contractor of the Company and who is or was involved in the creation or development of any Company Intellectual Property has signed an agreement containing an assignment to the Company of such person's rights in and to such Company Intellectual Property, (vi) to the knowledge of the Company, no third party has any ownership right in or to any Intellectual Property that is claimed to be owned by the Company, other than any co-owner of any patent constituting Intellectual Property who is listed on the records of the U.S. Patent and Trademark Office (the "USPTO") or any foreign or international patent authority and any co-owner of any patent application constituting Intellectual Property who is named in such patent application, and, to the knowledge of the Company, no third party has any ownership right in or to any Intellectual Property in any field of use that is exclusively licensed to the Company, other than any licensor to the Company of such Intellectual Property, (vii) there is no material infringement by third parties of any Company Intellectual Property, (viii) there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others challenging the Company's rights in or to the Company Intellectual Property, and (ix) there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others challenging the validity or scope of any Company Intellectual Property. The Company is in compliance in all material respects with the terms of each agreement pursuant to which Intellectual Property has been licensed to the Company, and all such agreements are in full force and effect.

(q) All patents and patent applications owned by or licensed to the Company or under which the Company has rights have, to the knowledge of the Company, been duly and properly filed and maintained in all material respects; to the knowledge of the Company, the parties prosecuting such patent applications have complied with their duty of candor and disclosure to the USPTO or any foreign or international patent authority in connection with such applications; and the Company is not aware of any facts required to be disclosed to the USPTO or any foreign or international patent authority that were not disclosed to the USPTO or any foreign or international patent authority and which would preclude the grant of a patent in connection with any such application or would reasonably be expected to form the basis of a finding of invalidity with respect to any patents that have issued with respect to such applications.

(r) The Company and each of its subsidiaries has good and marketable title in fee simple to all real property owned by it, and good and marketable title to all personal property owned by it, in each case free and clear of all liens, encumbrances and defects, except as are described in the Prospectus or such as do not materially affect the value of

such property and do not materially interfere with the use made or proposed to be made of such property by the Company and its subsidiaries. All property held under lease by the Company and its subsidiaries is held by them under valid, existing and enforceable leases, with only such exceptions as are not material and do not materially interfere with the use made or proposed to be made of such property by the Company and its subsidiaries. Subsequent to the respective dates as of which information is given in the Registration Statement and the Prospectus, (i) there has not been any Material Adverse Effect; (ii) neither the Company nor any of its subsidiaries has sustained any loss or interference with its assets, businesses or properties (whether owned or leased) from fire, explosion, earthquake, flood or other calamity, whether or not covered by insurance, or from any labor dispute or any court or legislative or other governmental action, order or decree which would reasonably be expected to have a Material Adverse Effect; and (iii) since the date of the latest balance sheet included or incorporated by reference in the Registration Statement and the Prospectus, except as otherwise disclosed in the Prospectus, neither the Company nor its subsidiaries has (A) incurred any liability or obligation, direct or contingent, for borrowed money, except such liabilities or obligations incurred in the ordinary course of business, (B) entered into any transaction not in the ordinary course of business or (C) declared or paid any dividend or made any distribution on any shares of its stock or redeemed, purchased or otherwise acquired or agreed to redeem, purchase or otherwise acquire any shares of its capital stock.

(s) There is no document, contract or other agreement required to be described in the Registration Statement or the Prospectus or to be filed as an exhibit to the Registration Statement which is not described or filed as required by the Securities Act or incorporated therein by reference as permitted by the Securities Act. Each description of a contract, document or other agreement in the Registration Statement and the Prospectus accurately reflects in all material respects the terms of the underlying contract, document or other agreement. Each contract, document or other agreement described in the Registration Statement, or the Prospectus or listed in the exhibits to the Registration Statement or incorporated by reference is, except as otherwise disclosed in the Prospectus, in full force and effect and is valid and enforceable by and against the Company or any of its subsidiaries, as the case may be, in accordance with its terms. Except as set forth in the Prospectus, neither the Company nor any of its subsidiaries, if a subsidiary is a party, nor to the Company's knowledge, any other party, is in default in the observance or performance of any term or obligation to be performed by it under any such agreement, and no event has occurred which with notice or lapse of time or both would constitute such a default, in any such case which default or event, individually or in the aggregate, would reasonably be expected to have a Material Adverse Effect. Except as set forth in the Prospectus, no default exists, and no event has occurred which with notice or lapse of time or both would constitute a default, in the due performance and observance of any term, covenant or condition, by the Company or its subsidiaries, if a subsidiary is a party thereto, of any other agreement or instrument to which the Company or any of its subsidiaries is a party or by which the Company or its properties or business of a subsidiary or its properties or business may be bound or affected which default or event, individually or in the aggregate, would reasonably be expected to have a Material Adverse Effect.

(t) The scientific (other than the Company's clinical trial results), statistical and market related data included in the Registration Statement and the Prospectus are based on or derived from sources that are credible and which the Company believes to be reliable and accurate.

(u) Neither the Company nor any of its subsidiaries is in violation of any term or provision of (i) its charter or by-laws or (ii) of any franchise, license, permit, judgment, decree, order, statute, rule or regulation, except, with respect to subsection (ii), where the consequences of such violation, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect.

(v) This Agreement has been duly and validly authorized, executed and delivered by the Company.

(w) Neither the execution, delivery and performance of this Agreement by the Company nor the consummation of any of the transactions contemplated hereby by the Company (including, without limitation, the issuance and sale by the Company of the Shares) will give rise to a right to terminate or accelerate the due date of any payment due under, or conflict with or result in the breach of any term or provision of, or constitute a default (or an event which with notice or lapse of time or both would constitute a default) under, or require any consent or waiver under, or result in the execution or imposition of any lien, charge or encumbrance upon any properties or assets of the Company or its subsidiaries pursuant to the terms of, any indenture, mortgage, deed of trust or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which either the Company or its subsidiaries or any of their properties or businesses is bound, or any franchise, license, permit, judgment, decree, order, statute, rule or regulation applicable to the Company or any of its subsidiaries, except as disclosed in the Prospectus or where it would not reasonably be expected to have a Material Adverse Effect, or violate any provisions of the charter or by-laws of the Company or any of its subsidiaries, except for such consents or waivers which have already been obtained and are in full force and effect.

(x) The Company had the authorized and outstanding capital stock as set forth in the Registration Statement and the Prospectus as of the dates for which such information is given therein. All of the issued and outstanding shares of Common Stock have been duly and validly issued and are fully paid and nonassessable. There are no statutory preemptive or other similar rights granted by the Company to subscribe for or to purchase or acquire any shares of Common Stock of the Company or any of its subsidiaries or any such rights pursuant to its charter or by-laws or any agreement or instrument to or by which the Company or any of its subsidiaries is a party or bound. All grants of options to acquire Common Stock (each, a "Company Stock Option") were validly issued and approved by the Board of Directors of the Company (the "Board"), a committee thereof or an individual with authority duly delegated by the Board or a committee thereof. Grants of Company Stock Options were (i) made in material compliance with all applicable laws and (ii) as a whole, made in material compliance with the terms of the plans under which such Company Stock Options were issued. There is no and has been no policy or practice of the Company to coordinate the grant of Company Stock Options with the release or other public

announcement of material information regarding the Company or its results of operations or prospects to minimize the exercise price of such Company Stock Options. The Shares, when issued and sold pursuant to this Agreement, will be duly and validly issued, fully paid and nonassessable and none of them will be issued in violation of any preemptive or other similar right granted by the Company. Except as disclosed in the Registration Statement and the Prospectus, there is no outstanding option, warrant or other right calling for the issuance by the Company of, and there is no commitment, plan or arrangement by the Company to issue, any share of stock of the Company or any security convertible into, or exercisable or exchangeable for, such stock. The Common Stock and the Shares conform in all material respects to all statements in relation thereto contained in the Registration Statement and the Prospectus. All outstanding shares of capital stock of each of the Company's subsidiaries have been duly authorized and validly issued and are fully paid and nonassessable and are owned directly by the Company or by another wholly owned subsidiary of the Company free and clear of any security interests, liens, encumbrances, equities or claims, other than those described in the Prospectus.

(y) No holder of any security of the Company has any right granted by the Company, which has not been waived or previously satisfied, to have any security owned by such holder included in the Registration Statement or, except as described in the Prospectus, to demand registration of the sale of any security owned by such holder.

(z) To the knowledge of the Company and except as described in the Prospectus, there are no legal or governmental proceedings pending to which the Company or any of its subsidiaries is a party or of which any property of the Company or any of its subsidiaries is the subject which, if determined adversely to the Company or any of its subsidiaries would reasonably be expected to individually or in the aggregate have a Material Adverse Effect; and, to the knowledge of the Company, no such proceedings are threatened by governmental authorities or others that, if determined adversely to the Company or any of its subsidiaries, would reasonably be expected to have a Material Adverse Effect.

(aa) All necessary corporate action has been duly and validly taken by the Company to authorize the execution, delivery and performance of this Agreement and the issuance and sale of the Shares by the Company. This Agreement has been duly and validly authorized, executed and delivered by the Company and constitutes and will constitute the legal, valid and binding obligation of the Company enforceable against the Company in accordance with its respective terms, except as the enforceability thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and by general equitable principles.

(bb) Neither the Company nor any of its subsidiaries is involved in any labor dispute nor, to the knowledge of the Company, is any such dispute threatened, which dispute would reasonably be expected to have a Material Adverse Effect. The Company is not aware of any existing or imminent labor disturbance by the employees of any of its principal suppliers or contractors which would reasonably be expected to have a Material Adverse Effect. The Company is not aware of any threatened or pending litigation between the Company or its subsidiaries and any of its executive officers which, if adversely determined, would reasonably be expected to have a Material Adverse Effect.

(cc) No transaction has occurred between or among the Company and any of its officers or directors, stockholders or any affiliate or affiliates of any such officer or director or stockholder that is required to be described in and is not described in the Registration Statement and the Prospectus.

(dd) The Company has not taken, nor will it take, directly or indirectly, any action designed to or which would reasonably be expected to cause or result in, or which has constituted or which might reasonably be expected to constitute, the stabilization or manipulation of the price of the Common Stock to facilitate the sale or resale of any of the Shares, in each case contrary to applicable law.

(ee) Except as any failure to comply with the following would not reasonably be expected to have a Material Adverse Effect, the Company and each of its subsidiaries has accurately prepared and filed all material Federal, state, local and foreign tax returns which are required to be filed through the date hereof, or has received timely extensions thereof, and has paid all taxes shown on such returns and all assessments received by it to the extent that the same are material and have become due. Except as disclosed in the Prospectus or as would not reasonably be expected to have a Material Adverse Effect, to the Company's knowledge, there are no tax audits or investigations pending; nor to the Company's knowledge are there any material proposed additional tax assessments against the Company or any of its subsidiaries.

(ff) The Common Stock is registered pursuant to Section 12(b) of the Exchange Act and the Shares have been duly authorized for listing on the Nasdaq Stock Market LLC's Global Select Market ("Nasdaq").

(gg) The Company has taken no action designed to, or to the Company's knowledge is likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or the listing of the Common Stock on Nasdaq, nor, except as disclosed in the Prospectus, has the Company received any notification that the Commission or Nasdaq is contemplating terminating such registration or listing. The Company has complied in all material respects with the applicable requirements of Nasdaq for maintenance of inclusion of the Common Stock thereon.

(hh) The Company and its subsidiaries make and keep accurate books, records and accounts. Except as otherwise set forth in the Prospectus, the Company and its subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences; the principal executive officer

and the principal financial officer of the Company have made all certifications required by the Sarbanes-Oxley Act of 2002 (the “Sarbanes-Oxley Act”) and any related rules and regulations promulgated by the Commission, and the statements contained in any such certification were complete and correct as of the dates on which they were made; the Company and each of its subsidiaries is otherwise in compliance in all material respects with all applicable effective provisions of the Sarbanes-Oxley Act.

(ii) The Company and its subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are customary in the businesses in which they are engaged or propose to engage immediately after giving effect to the offering of the Shares as described in the Prospectus; all policies of insurance insuring the Company or its subsidiaries are in full force and effect. The Company and each of its subsidiaries are in compliance with the terms of such policies and instruments in all material respects.

(jj) Each approval, consent, order, authorization, designation, declaration or filing of, by or with any regulatory, administrative or other governmental body necessary in connection with the execution and delivery by the Company of this Agreement and the consummation of the transactions herein contemplated required to be obtained or performed by the Company (except such additional steps as may be required by the Financial Industry Regulatory Authority (“FINRA”) or may be necessary to qualify the Shares for public offering by the Manager under the state securities or Blue Sky laws) has been obtained or made and is in full force and effect.

(kk) All of the information provided to the Manager or to counsel for the Manager by the Company, its officers and directors and the holders of any securities (debt or equity) or options to acquire any securities of the Company in connection with letters, filings or other supplemental information provided to FINRA pursuant to FINRA Rules 5110, 5190 and 5121 is true, complete and correct. Neither the Company nor any of its affiliates directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, or is a person associated with any member firm of FINRA.

(ll) Except as otherwise set forth in the Prospectus, (i) neither the Company nor any of its subsidiaries are in violation of any applicable rules, laws and regulation relating to the use, treatment, storage and disposal of toxic substances and protection of health or the environment (“Environmental Law”) which are applicable to its business, except for any violation which would not reasonably be expected to have a Material Adverse Effect; (ii) neither the Company nor its subsidiaries has received any notice from any governmental authority or third party of a material asserted claim under Environmental Laws; (iii) each of the Company and each of its subsidiaries has received all permits, licenses or other approvals required of it under applicable Environmental Laws material to the conduct of its business and is in compliance with all terms and conditions of any such permit, license or approval, except for where non-compliance would not reasonably be expected to have a Material Adverse Effect; (iv) to the Company’s knowledge, no facts currently exist that will require the Company or any of its subsidiaries to make future material capital expenditures to comply with Environmental Laws; and (v) no property

which is or has been owned, or to the Company's knowledge, leased or occupied by the Company or its subsidiaries has been designated as a Superfund site pursuant to the Comprehensive Environmental Response, Compensation of Liability Act of 1980, as amended (42 U.S.C. Section 9601, et. seq.) ("CERCLA") or otherwise designated as a contaminated site under applicable state or local law. To the Company's knowledge, neither the Company nor any of its subsidiaries has been named as a "potentially responsible party" under CERCLA.

(mm) In the ordinary course of its business, the Company periodically reviews the effect of Environmental Laws on the business, operations and properties of the Company and its subsidiaries, in the course of which the Company identifies and evaluates associated costs and liabilities (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws, or any permit, license or approval, any related constraints on operating activities and any potential liabilities to third parties). On the basis of such review, the Company has reasonably concluded that such associated costs and liabilities would not, singly or in the aggregate, have a Material Adverse Effect.

(nn) The Company is not and, after giving effect to the offering and sale of the Shares and the application of the net proceeds therefrom as described in the Prospectus, will not be subject to registration as an "investment company" within the meaning of the Investment Company Act of 1940, as amended.

(oo) Neither the Company nor any other person associated with or acting on behalf of the Company including, without limitation, any director, officer, agent or employee of the Company or its subsidiaries, has, while acting on behalf of the Company or its subsidiaries (i) used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity; (ii) made any unlawful payment to foreign or domestic government officials or employees or to foreign or domestic political parties or campaigns from corporate funds; (iii) violated any provision of the Foreign Corrupt Practices Act of 1977 or the U.K. Bribery Act 2010, each as amended, or similar law of any relevant jurisdiction, or the rules or regulations thereunder; or (iv) made any other unlawful payment.

(pp) The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions applicable to the Company, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "Money Laundering Laws") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending, or to the knowledge of the Company, threatened.

(qq) Neither the Company nor any of its subsidiaries nor, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or any of

its subsidiaries (i) is, or is controlled or 50% or more owned in the aggregate by or is acting on behalf of, one or more individuals or entities that are currently the subject of any sanctions administered or enforced by the United States (including any administered or enforced by the Office of Foreign Assets Control of the U.S. Department of the Treasury, the U.S. Department of State or the Bureau of Industry and Security of the U.S. Department of Commerce), the United Nations Security Council, the European Union, a member state of the European Union (including sanctions administered or enforced by Her Majesty's Treasury of the United Kingdom) or other relevant sanctions authority (collectively, "Sanctions" and such persons, "Sanctioned Persons" and each such person, a "Sanctioned Person"), (ii) is located, organized or resident in a country or territory that is, or whose government is, the subject of Sanctions that broadly prohibit dealings with that country or territory (collectively, "Sanctioned Countries" and each, a "Sanctioned Country") or (iii) will, directly or indirectly, use the proceeds of the offering of the Shares, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other individual or entity in any manner that would result in a violation of any Sanctions by, or would result in the imposition of Sanctions against, any individual or entity (including any individual or entity participating in the offering, whether as underwriter, advisor, investor or otherwise). Neither the Company nor any of its subsidiaries has engaged in any dealings or transactions with or for the benefit of a Sanctioned Person, or with or in a Sanctioned Country, in the preceding 3 years, nor does the Company or any of its subsidiaries have any plans to engage in dealings or transactions with or for the benefit of a Sanctioned Person, or with or in a Sanctioned Country.

(rr) Except as described in the Prospectus, the Company has not sold or issued any shares of Common Stock during the six-month period preceding the date of the Prospectus, including any sales pursuant to Rule 144A under, or Regulations D or S of, the Securities Act, other than shares issued pursuant to equity incentive plans or other employee compensation plans or pursuant to outstanding options, rights or warrants.

(ss) The Company has fulfilled its obligations, if any, in all material respects under the minimum funding standards of Section 302 of the U.S. Employee Retirement Income Security Act of 1974 ("ERISA") and the regulations and published interpretations thereunder with respect to each "plan" as defined in Section 3(3) of ERISA and such regulations and published interpretations in which its employees are eligible to participate and each such plan is in compliance in all material respects with the presently applicable provisions of ERISA and such regulations and published interpretations. No "Reportable Event" (as defined in 12 ERISA) has occurred with respect to any "Pension Plan" (as defined in ERISA) for which the Company would have any material liability.

(tt) The Company has established and maintains disclosure controls and procedures (as such term is defined in Rule 13a-15 under the Exchange Act), which (i) are designed to ensure that material information relating to the Company is made known to the Company's principal executive officer and its principal financial officer by others within the Company, particularly during the periods in which the periodic reports required under the Exchange Act are being prepared; (ii) provide for the periodic evaluation of the effectiveness of such disclosure controls and procedures as required by the Exchange Act;

and (iii) except as otherwise set forth in the Prospectus, are effective in all material respects to perform the functions for which they were established. Based on the evaluation of its disclosure controls and procedures and except as otherwise set forth in the Prospectus, the Company is not aware of (i) any significant deficiency in design or operation of internal controls that would adversely affect the Company's ability to record, process, summarize and report financial data or any material weaknesses to internal controls; or (ii) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls. Except as otherwise set forth in the Prospectus, since the date of the most recent evaluation of such disclosure controls and procedures, there have been no changes that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting, including any corrective actions with regard to significant deficiencies and material weaknesses.

(uu) There are no material off-balance sheet arrangements (as defined in Item 303 of Regulation S-K) that have or are reasonably likely to have a material current or future effect on the Company's financial condition, revenues or expenses, changes in financial condition, results of operations, liquidity, capital expenditures or capital resources that are required to be disclosed in the Prospectus and have not been so disclosed.

(vv) The Board has validly appointed an audit committee whose composition satisfies the requirements of Rule 5605(c)(2) of the Nasdaq Stock Market Rules and the Board and/or the audit committee has adopted a charter that satisfied the requirements of Rule 5605(c)(1) of the Nasdaq Stock Market Rules. The audit committee has reviewed the adequacy of its charters within the past twelve months.

(ww) (i) All audit and non-audit services performed by the Accountants have been preapproved in accordance with the requirements set forth in Section 10A of the Exchange Act and (ii) the Accountants have not engaged and as of the date hereof are not engaging in any "prohibited activities" (as defined in Section 10A of the Exchange Act) on behalf of the Company.

(xx) Except as described in the Registration Statement and the Prospectus, the Company: (i) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the FDA or any arbitrator, court, governmental body, regulatory body, administrative agency or other authority, body or agency having jurisdiction over the Company or any of its properties, assets or operations (each, a "Governmental Entity") alleging or asserting material noncompliance with any Health Care Laws (as defined below) or any Permits required by any such Health Care Laws ("Authorizations"); (ii) possesses all material Authorizations and such Authorizations are valid and in full force and effect and the Company is not in material violation of any term of any such Authorizations; (iii) has not received notice that the FDA or any Governmental Entity has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Authorizations and has no knowledge that the FDA or any Governmental Entity is considering such action; and (iv) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Health Care Laws or Authorizations and that all such material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission).

(yy) The Company has operated and currently is in compliance in all material respects with all applicable Health Care Laws, rules and regulations, including, without limitation, (i) the Federal Food, Drug and Cosmetic Act (21 U.S.C. §§ 301 et seq.) (the “FFDCA”); (ii) all applicable federal, state, local and all applicable foreign healthcare related fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute (42 U.S.C. § 1320a-7b(b)), the U.S. Physician Payments Sunshine Act (42 U.S.C. § 1320a-7h), the civil False Claims Act (31 U.S.C. §§ 3729 et seq.), the criminal False Claims Law (42 U.S.C. § 1320a-7b(a)), all criminal laws relating to healthcare fraud and abuse, including but not limited to 18 U.S.C. Sections 286 and 287, the healthcare fraud criminal provisions under the U.S. Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) (42 U.S.C. §§ 1320d et seq.), the exclusion laws (42 U.S.C. § 1320a-7), and the civil monetary penalties law (42 U.S.C. § 1320a-7a), (iii) Medicare (Title XVIII of the Social Security Act), and Medicaid (Title XIX of the Social Security Act); (iv) HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 (42 U.S.C. §§ 17921 et seq.); (v) the Public Health Service Act (42 U.S.C. §§ 201 et seq.); (vi) the regulations promulgated pursuant to such laws; and (vii) any other similar local, state, federal, or foreign laws (collectively, the “Health Care Laws”). Neither the Company, nor any of its officers or directors, nor, to the knowledge of the Company, its employees or agents have engaged in activities which are, as applicable, cause for false claims liability, civil penalties, or mandatory or permissive exclusion from Medicare, Medicaid, or any other state or federal healthcare program. The Company has not received notice or other correspondence of any claim, action, suit, audit, survey, proceeding, hearing, enforcement, investigation, arbitration or other action (“Action”) from any court or arbitrator or Governmental Entity or third party alleging or asserting noncompliance with any Health Care Law applicable to the Company or Authorizations, and, to the Company’s knowledge, no such Action is threatened. The Company is not a party to and does not have any ongoing reporting obligations pursuant to any corporate integrity agreement, deferred prosecution agreement, monitoring agreement, consent decree, settlement order, plan of correction or similar agreement with or imposed by any governmental or regulatory authority. Additionally, neither the Company, nor any of its officers or directors, nor, to the knowledge of the Company, its employees, has been excluded, suspended or debarred from participation in any U.S. state or federal health care program or human clinical research or is subject to a governmental inquiry, investigation, proceeding, or other any other Action that could reasonably be expected to result in debarment, suspension, or exclusion.

(zz) The studies, tests and preclinical and clinical trials conducted by or on behalf of the Company were and, if still ongoing, are being conducted in all material respects in accordance with experimental protocols, procedures and controls pursuant to accepted professional scientific standards and all Authorizations and Health Care Laws, including, without limitation, the FFDCA and 21 C.F.R. Parts 50, 54, 56, 58, and 312; the

descriptions of the results of such studies, tests and trials contained in the Registration Statement and the Prospectus are accurate and complete in all material respects and fairly present the data derived from such studies, tests and trials; except to the extent disclosed in the Registration Statement and the Prospectus, the Company is not aware of any studies, tests or trials, the results of which the Company believes reasonably call into question the study, test, or trial results described or referred to in the Registration Statement and the Prospectus; and, except to the extent disclosed in the Registration Statement or the Prospectus, the Company has not received any notices or correspondence from the FDA or Governmental Entity requiring the termination or suspension of any studies, tests or preclinical or clinical trials that are described in the Registration Statement or the Prospectus, other than ordinary course communications with respect to modifications in connection with the design and implementation of such trials, copies of which communications have been made available to the Manager.

(aaa) The Company has not, directly or indirectly, extended or maintained credit, or arranged for the extension of credit, or renewed an extension of credit, in the form of a personal loan to or for any of its directors or executive officers in violation of applicable laws, including Section 402 of the Sarbanes-Oxley Act.

(bbb) Other than as contemplated by this Agreement, the Company has not incurred any liability for any brokerage commission, finder's fee or like payment in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby.

(ccc) Except as disclosed in the Registration Statement and the Prospectus, the Company (i) does not have any material lending or other relationship with any bank or lending affiliate of Citigroup Global Markets Holdings Inc. and (ii) does not intend to use any of the proceeds from the sale of the Shares hereunder to repay any outstanding debt owed to any affiliate of Citigroup Global Markets Holdings Inc.

(ddd) Subject to any restrictions under applicable law, no subsidiary of the Company is currently prohibited, directly or indirectly, from paying any dividends to the Company, from making any other distribution on such subsidiary's capital stock, from repaying to the Company any loans or advances to such subsidiary from the Company or from transferring any of such subsidiary's property or assets to the Company or any other subsidiary of the Company, except as described in or contemplated by the Prospectus (exclusive of any supplement thereto) or except as would not reasonably be expected to have a Material Adverse Effect.

Any certificate signed by any officer of the Company and delivered to the Manager or counsel for the Manager in connection with this Agreement or any Terms Agreement shall be deemed a representation and warranty by the Company, as to matters covered thereby, to the Manager.

3. Sale and Delivery of Shares.

(a) Subject to the terms and conditions and in reliance upon the representations and warranties herein set forth, the Company agrees to issue and sell Shares from time to time through the Manager (each a “Placement”), acting as sales agent, and the Manager agrees to use its reasonable efforts to sell, as sales agent for the Company, the Shares on the following terms.

(i) The Shares are to be sold on a daily basis or otherwise as shall be agreed to by the Company and the Manager on any day that (A) is a trading day for Nasdaq (B) the Company has instructed the Manager by telephone (confirmed promptly by electronic mail) to make such sales and (C) the Company has satisfied its obligations under Section 6 of this Agreement. The Company will designate the maximum amount of the Shares to be sold by the Manager daily as agreed to by the Manager (in any event not in excess of the amount available for issuance under the Prospectus and the currently effective Registration Statement) and the minimum price per Share at which such Shares may be sold. Subject to the terms and conditions hereof, the Manager shall use its reasonable efforts to sell on a particular day all of the Shares designated for the sale by the Company on such day. The gross sales price of the Shares sold under this Section 3(a) shall be the market price for shares of the Company’s Common Stock sold by the Manager under this Section 3(a) on Nasdaq at the time of sale of such Shares.

(ii) The Company acknowledges and agrees that (A) there can be no assurance that the Manager will be successful in selling the Shares, (B) the Manager will incur no liability or obligation to the Company or any other person or entity if it does not sell Shares for any reason other than a failure by the Manager to use its reasonable efforts consistent with its normal trading and sales practices and applicable law and regulations to sell such Shares as required under this Agreement, and (C) the Manager shall be under no obligation to purchase Shares on a principal basis pursuant to this Agreement, except as otherwise specifically agreed by the Manager and the Company.

(iii) The Company shall not authorize the issuance and sale of, and the Manager shall not be obligated to use its reasonable efforts to sell, any Share at a price lower than the minimum price therefor designated from time to time by the Board, or a duly authorized committee thereof, and notified to the Manager in writing. The Company or the Manager may, upon notice to the other party hereto by telephone (confirmed promptly by electronic mail), suspend the offering of the Shares for any reason and at any time; provided, however, that such suspension or termination shall not affect or impair the parties’ respective obligations with respect to the Shares sold hereunder prior to the giving of such notice.

(iv) The Manager hereby covenants and agrees not to make any sales of the Shares on behalf of the Company, pursuant to this Section 3(a), other than (A) by means of ordinary brokers’ transactions between members of the Nasdaq Stock Market LLC that qualify for delivery of a Prospectus to the Nasdaq Stock Market LLC in accordance with Rule 153 (such transactions are hereinafter referred to as “Continuous Offerings”) and (B) such other sales of the Shares on behalf of the Company in its capacity as agent of the Company as shall be agreed by the Company and the Manager pursuant to a Terms Agreement.

(v) The compensation to the Manager for sales of the Shares with respect to which the Manager acts as sales agent under this Agreement shall be up to 3% of the gross sales price of the Shares sold pursuant to this Section 3(a) and payable as described in the succeeding subsection (vi) below. The foregoing rate of compensation shall not apply when the Manager acts as principal, in which case the Company may sell Shares to the Manager as principal at a price agreed upon at the relevant Applicable Time pursuant to a Terms Agreement. The remaining proceeds, after further deduction for any transaction fees imposed by any governmental or self-regulatory organization in respect of such sales (the “Transaction Fees”), shall constitute the net proceeds to the Company for such Shares (the “Net Proceeds”).

(vi) The Manager shall provide written confirmation (which may be by facsimile or electronic mail) to the Company following the close of trading on Nasdaq each day in which the Shares are sold under this Section 3(a) setting forth the number of the Shares sold on such day, the aggregate gross sales proceeds and the Net Proceeds to the Company, and the compensation payable by the Company to the Manager with respect to such sales. Such compensation shall be set forth and invoiced in periodic statements from the Manager to the Company, with payment to be made by the Company promptly after its receipt thereof.

(vii) Settlement for sales of the Shares pursuant to this Section 3(a) will occur on the second business day following the date on which such sales are made (each such day, a “Settlement Date”). On each Settlement Date, the Shares sold through the Manager for settlement on such date shall be issued and delivered by the Company to the Manager against payment of the aggregate gross sales proceeds less any Transaction Fees for the sale of such Shares. Settlement for all such Shares shall be effected by free delivery of the Shares to the Manager’s account at The Depository Trust Company (“DTC”) in return for payments in same day funds delivered to the account designated by the Company. If the Company or its transfer agent (if applicable) shall default on its obligation to deliver the Shares on any Settlement Date, the Company shall (A) indemnify and hold the Manager harmless against any loss, claim or damage arising from or as a result of such default by the Company and (B) pay the Manager any commission to which it would otherwise be entitled absent such default. If the Manager breaches this Agreement by failing to deliver the aggregate gross sales proceeds less any Transaction Fees to the Company on any Settlement Date for the Shares delivered by the Company, the Manager will pay the Company interest based on the effective overnight federal funds rate on such unpaid amount less any compensation due to the Manager.

(viii) At each Applicable Time, Settlement Date and Representation Date (as defined in Section 4(k)), the Company shall be deemed to have affirmed each representation and warranty contained in this Agreement as if such representation and warranty were made as of such date, modified as necessary to relate to the

Registration Statement and the Prospectus as amended as of such date. Any obligation of the Manager to use its reasonable efforts to sell the Shares on behalf of the Company shall be subject to the continuing accuracy of the representations and warranties of the Company herein, to the performance by the Company of its obligations hereunder and to the continuing satisfaction of the additional conditions specified in Section 6 of this Agreement.

(b) If the Company wishes to issue and sell the Shares pursuant to this Agreement but other than as set forth in Section 3(a) of this Agreement, it will notify the Manager of the proposed terms of such Placement. If the Manager, acting as principal, wishes to accept such proposed terms (which it may decline to do for any reason in its sole discretion) or, following discussions with the Company wishes to accept amended terms, the Manager and the Company will enter into a Terms Agreement setting forth the terms of such Placement. The terms set forth in a Terms Agreement will not be binding on the Company or the Manager unless and until the Company and the Manager have each executed such Terms Agreement accepting all of the terms of such Terms Agreement. In the event of a conflict between the terms of this Agreement and the terms of a Terms Agreement, the terms of such Terms Agreement will control.

(c) Each sale of the Shares to the Manager shall be made in accordance with the terms of this Agreement and, if applicable, a Terms Agreement, which will provide for the sale of such Shares to, and the purchase thereof by, the Manager. A Terms Agreement may also specify certain provisions relating to the reoffering of such Shares by the Manager. The commitment of the Manager to purchase the Shares pursuant to any Terms Agreement shall be deemed to have been made on the basis of the representations and warranties of the Company herein contained and shall be subject to the terms and conditions herein set forth. Each Terms Agreement shall specify the number of the Shares to be purchased by the Manager pursuant thereto, the price to be paid to the Company for such Shares, any provisions relating to rights of, and default by, underwriters acting together with the Manager in the reoffering of the Shares, and the time and date (each such time and date being referred to herein as a “Time of Delivery”) and place of delivery of and payment for such Shares. Such Terms Agreement shall also specify any requirements for opinions of counsel, accountants’ letters and officers’ certificates pursuant to Section 6 of this Agreement and any other information or documents required by the Manager.

(d) Under no circumstances shall the number and aggregate amount of the Shares sold pursuant to this Agreement and any Terms Agreement exceed (i) the aggregate amount set forth in Section 1, (ii) the number of shares of the Common Stock available for issuance under the currently effective Registration Statement or (iii) the number and aggregate amount of the Shares authorized from time to time to be issued and sold under this Agreement by the Board, or a duly authorized committee thereof, and notified to the Manager in writing.

(e) If either party has reason to believe that the exemptive provisions set forth in Rule 101(c)(1) of Regulation M under the Exchange Act are not satisfied with respect to the Shares, it shall promptly notify the other party and sales of the Shares under this Agreement and any Terms Agreement shall be suspended until that or other exemptive provisions have been satisfied in the judgment of each party.

(f) Notwithstanding any other provision of this Agreement the Company shall not request the sale of any Shares that would be sold, and the Manager shall not be obligated to sell, during any period in which the Company is, or would reasonably be deemed to be, in possession of material non-public information.

4. Agreements. The Company agrees with the Manager that:

(a) During any period when the delivery of a prospectus relating to the Shares is required (including in circumstances where such requirement may be satisfied pursuant to Rule 172 or any similar rule) to be delivered under the Securities Act, the Company will not file any amendment of the Registration Statement or supplement (including the Prospectus Supplement or any Interim Prospectus Supplement) to the Base Prospectus or any Rule 462(b) Registration Statement (other than an amendment or supplement relating to an offering of the Company's securities which is unrelated to the offering of Shares hereunder or any amendment pursuant to Section 10(a)(3) of the Securities Act deemed effected pursuant to the filing of an Annual Report on Form 10-K by the Company) unless the Company has furnished to the Manager a copy for its review prior to filing and will not file any such proposed amendment or supplement to which the Manager reasonably objects. The Company has properly completed the Prospectus, in a form approved by the Manager, and filed such Prospectus, as amended at the Execution Time, with the Commission pursuant to the applicable paragraph of Rule 424(b) by the Execution Time and will cause any supplement to the Prospectus to be properly completed, in a form approved by the Manager, and will file such supplement with the Commission pursuant to the applicable paragraph of Rule 424(b) within the time period prescribed thereby and will provide evidence satisfactory to the Manager of such timely filing. The Company will promptly advise the Manager (i) when the Prospectus, and any supplement thereto, shall have been filed (if required) with the Commission pursuant to Rule 424(b) or when any Rule 462(b) Registration Statement shall have been filed with the Commission, (ii) when, during any period when the delivery of a prospectus (whether physically or through compliance with Rule 172 or any similar rule) is required under the Securities Act in connection with the offering or sale of the Shares, any amendment to the Registration Statement shall have been filed or become effective, (iii) of any request by the Commission or its staff for any amendment of the Registration Statement, or any Rule 462(b) Registration Statement, or for any supplement to the Prospectus or for any additional information, (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or of any notice objecting to its use or the institution or threatening of any proceeding for that purpose, and (v) of the receipt by the Company of any notification with respect to the suspension of the qualification of the Shares for sale in any jurisdiction or the institution or threatening of any proceeding for such purpose. Notwithstanding the foregoing, the Company shall not be obligated to provide notice of or furnish copies of any report or statement filed with the Commission to the extent it is available on the Commission's Electronic Data Gathering, Analysis, and Retrieval System. The Company will use its best efforts to prevent the issuance of any

such stop order or the occurrence of any such suspension or objection to the use of the Registration Statement and, upon such issuance, occurrence or notice of objection, to obtain as soon as possible the withdrawal of such stop order or relief from such occurrence or objection, including, if necessary, by filing an amendment to the Registration Statement or a new registration statement and using its best efforts to have such amendment or new registration statement declared effective as soon as practicable.

(b) If, at any time on or after an Applicable Time but prior to the related Settlement Date or Time of Delivery, any event occurs as a result of which the Prospectus would include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein in the light of the circumstances under which they were made or the circumstances then prevailing not misleading, the Company will (i) notify promptly the Manager so that any use of the Prospectus may cease until it is amended or supplemented; (ii) amend or supplement the Prospectus to correct such statement or omission; and (iii) supply any amendment or supplement to the Manager in such quantities as the Manager may reasonably request.

(c) During any period when the delivery of a prospectus relating to the Shares is required (including in circumstances where such requirement may be satisfied pursuant to Rule 172 or any similar rule) to be delivered under the Securities Act, any event occurs as a result of which the Prospectus as then supplemented would include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein in the light of the circumstances under which they were made at such time not misleading, or if it shall be necessary to amend the Registration Statement, file a new registration statement or supplement the Prospectus to comply with the Securities Act or the Exchange Act or the respective rules thereunder, including in connection with use or delivery of the Prospectus, the Company promptly will (i) notify the Manager of any such event, (ii) prepare and file with the Commission, subject to the second sentence of paragraph (a) of this Section 4, an amendment or supplement or new registration statement which will correct such statement or omission or effect such compliance, (iii) use its best efforts to have any amendment to the Registration Statement or new registration statement declared effective as soon as practicable in order to avoid any disruption in use of the Prospectus and (iv) supply any supplemented Prospectus to the Manager in such quantities as the Manager may reasonably request.

(d) As soon as practicable, the Company will make generally available to its security holders and to the Manager an earnings statement or statements of the Company and its subsidiaries, if any, which will satisfy the provisions of Section 11(a) of the Securities Act and Rule 158.

(e) The Company will furnish to the Manager and counsel for the Manager, without charge, signed copies of the Registration Statement (including exhibits thereto) and, so long as delivery of a prospectus by the Manager or dealer may be required by the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 or any similar rule), as many copies of the Prospectus and each Issuer Free Writing Prospectus and any supplement thereto as the Manager may reasonably request. The Company will pay the expenses of printing or other production of all documents relating to the offering.

(f) The Company will arrange, if necessary, for the qualification of the Shares for sale under the laws of such jurisdictions as the Manager may designate and will maintain such qualifications in effect so long as required for the distribution of the Shares; provided that in no event shall the Company be obligated to qualify to do business in any jurisdiction where it is not now so qualified or to take any action that would subject it to service of process in suits, other than those arising out of the offering or sale of the Shares, in any jurisdiction where it is not now so subject.

(g) The Company agrees that, unless it has or shall have obtained the prior written consent of the Manager, and the Manager agrees with the Company that, unless it has or shall have obtained, as the case may be, the prior written consent of the Company, it has not made and will not make any offer relating to the Shares that would constitute an Issuer Free Writing Prospectus or that would otherwise constitute a “free writing prospectus” (as defined in Rule 405) required to be filed by the Company with the Commission or retained by the Company under Rule 433; provided that the prior written consent of the parties hereto shall be deemed to have been given in respect of the Free Writing Prospectuses included in Schedule I hereto. Any such free writing prospectus consented to by the Manager or the Company is hereinafter referred to as a “Permitted Free Writing Prospectus.” The Company agrees that (i) it has treated and will treat, as the case may be, each Permitted Free Writing Prospectus as an Issuer Free Writing Prospectus and (ii) it has complied and will comply, as the case may be, with the requirements of Rules 164 and 433 applicable to any Permitted Free Writing Prospectus, including in respect of timely filing with the Commission, legending and record keeping.

(h) While a Placement is in effect, the Company will not offer, sell, contract to sell, pledge, or otherwise dispose of, or file a registration statement with the Commission in respect of (other than any Registration Statement on Form S-8 or Form S-4, or any successors to such forms), any other shares of Common Stock or any securities convertible into, or exercisable, or exchangeable for, shares of Common Stock, or publicly announce an intention to effect any such transaction, without giving the Manager at least five Business Days’ prior written notice specifying the nature of the proposed transaction and the date of such proposed transaction; provided, however, that the Company may, without giving such notice, issue and sell (i) Common Stock pursuant to this Agreement or any Terms Agreement, (ii) Common Stock pursuant to any equity incentive plan, inducement plan, employee stock purchase plan, stock ownership plan or dividend reinvestment plan of the Company approved by the Board, (iii) Common Stock upon the exercise or conversion of any warrants, options, or other derivative securities, and (iv) Common Stock or securities convertible into or exchangeable for Common Stock as consideration for mergers, acquisitions, other business combinations, joint ventures or strategic alliances occurring after the date of this Agreement which are not used for capital raising purposes.

(i) The Company will not (i) take, directly or indirectly, any action designed to or that would constitute or that might reasonably be expected to cause or result in, under the Exchange Act or otherwise, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares or (ii) sell, bid for, purchase Common Stock in violation of Regulation M or pay any person (other than as contemplated by this Agreement or any Terms Agreement) any compensation for soliciting purchases of the Shares.

(j) The Company will, at any time during the term of this Agreement, as supplemented from time to time, advise the Manager immediately after it shall have received notice or obtain knowledge thereof, of any information or fact that would alter or affect any opinion, certificate, letter and other document provided to the Manager pursuant to Section 6 herein.

(k) On the date the Company first requests a Placement (and upon the recommencement of the offering of the Shares under this Agreement following the termination of a suspension of sales hereunder), and each time that (i) the Registration Statement or the Prospectus shall be amended or supplemented (other than an Interim Prospectus Supplement filed pursuant to Rule 424(b) pursuant to Section 4(x) of this Agreement, a prospectus supplement relating solely to the offering of securities other than the Shares or an amendment or supplement effected by the filing with the Commission of any document incorporated by reference therein), (ii) the Company files an Annual Report on Form 10-K, a Quarterly Report on Form 10-Q or a Current Report on Form 8-K containing amended financial information (other than information “furnished” pursuant to Items 2.02 or 7.01 of Form 8-K or to provide disclosure pursuant to Item 8.01 of Form 8-K relating to the reclassification of certain properties as discontinued operations in accordance with Statement of Financial Accounting Standards No. 144) under the Exchange Act, (iii) the Shares are delivered to the Manager as principal at the Time of Delivery pursuant to a Terms Agreement, or (iv) there occurs an event that would reasonably be expected to materially affect the Company and its subsidiaries, if any, taken as a whole, and the Manager reasonably requests (the date on which the Company first requests a Placement and each such date referred to in (i), (ii), (iii) and (iv) above, a “Representation Date”), the Company shall furnish or cause to be furnished to the Manager forthwith a certificate dated and delivered the date of such Placement, effectiveness of such amendment, the date of filing with the Commission of such supplement or other document, the Time of Delivery, or promptly upon request, as the case may be, in form reasonably satisfactory to the Manager to the effect that the statements contained in the certificate referred to in Section 6(d) of this Agreement which were last furnished to the Manager are true and correct at the time of such commencement or recommencement, amendment, supplement, filing, or delivery, as the case may be, as though made at and as of such time (except that such statements shall be deemed to relate to the Registration Statement and the Prospectus as amended and supplemented to such time) or, in lieu of such certificate, a certificate of the same tenor as the certificate referred to in said Section 6(d), modified as necessary to relate to the Registration Statement and the Prospectus as amended and supplemented to the time of delivery of such certificate; provided, however, the requirement to deliver a certificate under this Section 4(k) shall be waived for any Representation Date occurring at a time at which no Placement is pending or no Terms Agreement is in effect (each, a “Waiver”), which Waiver, in each case, shall continue until such time as the Company delivers its next Placement or enters into a Terms Agreement.

(l) On or prior to the date the Company first requests a Placement, the Company shall cause to be furnished to the Manager a written opinion and letter of Cooley LLP, or such other counsel to the Company reasonably satisfactory to the Manager (“Company Counsel”), covering opinions and statements substantially in the forms attached hereto as Annex II-A and Annex II-B. Thereafter, at each Representation Date, the Company shall cause to be furnished to the Manager a letter of Company Counsel in the form attached hereto as Annex II-B, dated and delivered the date of such Representation Date, in form and substance reasonably satisfactory to the Manager, but modified as necessary to relate to the Registration Statement and the Prospectus as amended and supplemented to the time of delivery of such letter; provided, however, the Company shall not be required to furnish such letter at any time a Waiver is in effect until such time as the Company delivers its next Placement or enters into a Terms Agreement.

(m) On or prior to the date the Company first requests a Placement and each time the Company files an Annual Report on Form 10-K and requests a Placement thereafter, or at the Manager’s request and upon notice to the Company, if the Company files a Quarterly Report on Form 10-Q or a Current Report on Form 8-K that includes material changes in the intellectual property disclosure from the most recently filed Annual Report on Form 10-K and the Company requests a Placement thereafter, the Company shall furnish or cause to be furnished forthwith to the Manager a written opinion of intellectual property counsel or counsels to the Company (“IP Counsel”) satisfactory to the Manager, dated and delivered prior to such Placement request.

(n) On or prior to the date the Company first requests a Placement, and each time that (i) the Registration Statement or the Prospectus shall be amended or supplemented to include additional amended financial information, (ii) the Shares are delivered to the Manager as principal at a Time of Delivery pursuant to a Terms Agreement, (iii) the Company files a Quarterly Report on Form 10-Q or an Annual Report on Form 10-K, or (iv) at the Manager’s request and upon notice to the Company, there is filed with the Commission a Current Report on Form 8-K containing amended financial information (other than information “furnished” pursuant to Items 2.02 or 7.01 of Form 8-K or to provide disclosure pursuant to Item 8.01 of Form 8-K relating to the reclassification of certain properties as discontinued operations in accordance with Statement of Financial Accounting Standards No. 144) incorporated by reference into the Prospectus, the Company shall cause the Accountants, or other independent accountants reasonably satisfactory to the Manager forthwith, to furnish the Manager a letter, dated the date of commencement or recommencement, effectiveness of such amendment, the date of filing of such supplement or other document with the Commission, or the Time of Delivery, as the case may be, in form reasonably satisfactory to the Manager, of the same tenor as the letter referred to in Section 6(e) of this Agreement but modified to relate to the Registration Statement and the Prospectus, as amended and supplemented to the date of such letter. Further, notwithstanding the foregoing, the Company shall not be required to furnish or cause to be furnished any such letter at any time a Waiver is in effect until such time as the Company delivers its next Placement Notice or enters into a Terms Agreement; provided, however, that such letter shall then be required to be furnished to the Manager prior to any further sales of Shares under this Agreement covering the period which would most recently have been required but for this sentence.

(o) Upon commencement of the offering of the Shares under this Agreement (and upon the recommencement of the offering of the Shares under this Agreement following the termination of a suspension of sales hereunder), and at each Representation Date, the Company will conduct a due diligence session, in form and substance reasonably satisfactory to the Manager, which shall include representatives of the management and the independent accountants of the Company. The Company shall cooperate timely with any reasonable due diligence request from or review conducted by the Manager or its agents from time to time in connection with the transactions contemplated by this Agreement, including, without limitation, providing information and available documents and access to appropriate corporate officers and the Company's agents during regular business hours and at the Company's principal offices, and timely furnishing or causing to be furnished such certificates, letters and opinions from the Company, its officers and its agents, as the Manager may reasonably request, to the extent permitted by applicable law.

(p) The Company consents to the Manager trading in the Common Stock for the Manager's own account and for the account of its clients at the same time as sales of the Shares occur pursuant to this Agreement or pursuant to a Terms Agreement.

(q) The Company will disclose in its Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q, as applicable, the number of Shares sold through the Agent under this Agreement, the Net Proceeds to the Company and the compensation paid by the Company with respect to sales of Shares pursuant to this Agreement during the relevant quarter.

(r) If to the knowledge of the Company, the conditions set forth in Section 6(a), 6(f) or 6(g) shall not be true and correct on the applicable Settlement Date, the Company will promptly notify the Manager of any such condition that is not true or correct.

(s) Each acceptance by the Company of an offer to purchase the Shares hereunder, and each execution and delivery by the Company of a Terms Agreement, shall be deemed to be an affirmation to the Manager that the representations and warranties of the Company contained in or made pursuant to this Agreement are true and correct as of the date of such acceptance or of such Terms Agreement as though made at and as of such date, and an undertaking that such representations and warranties will be true and correct as of the Settlement Date for the Shares relating to such acceptance or as of the Time of Delivery relating to such sale, as the case may be, as though made at and as of such date (except that such representations and warranties shall be deemed to relate to the Registration Statement and the Prospectus as amended and supplemented relating to such Shares).

(t) The Company shall ensure that there are at all times sufficient shares of Common Stock to provide for the issuance, free of any preemptive rights, out of its authorized but unissued shares of Common Stock or shares of Common Stock held in treasury, of the maximum aggregate number of Shares authorized for issuance by the Board pursuant to the terms of this Agreement. The Company will use its commercially reasonable efforts to cause the Shares to be listed for trading on Nasdaq and to maintain such listing.

(u) During any period when the delivery of a prospectus relating to the Shares is required (including in circumstances where such requirement may be satisfied pursuant to Rule 172 or any similar rule) to be delivered under the Securities Act, the Company will file all documents required to be filed with the Commission pursuant to the Exchange Act within the time periods required by the Exchange Act and the regulations thereunder.

(v) The Company shall cooperate with Manager and use its reasonable efforts to permit the Shares to be eligible for clearance and settlement through the facilities of DTC.

(w) The Company will apply the Net Proceeds from the sale of the Shares in the manner set forth in the Prospectus.

(x) The Company will file a prospectus supplement with the Commission under the applicable paragraph of Rule 424(b) on such dates as the Securities Act shall require, which prospectus supplement will set forth, within the relevant period, the number of the Shares sold through the Manager as agent pursuant to Section 3(a) of this Agreement in Continuous Offerings, the Net Proceeds to the Company and the compensation paid by the Company with respect to such sales of the Shares pursuant to Section 3(a) of this Agreement and deliver such number of copies of each such prospectus supplement to Nasdaq as are required by such exchange.

5. Payment of Expenses.

(a) The Company agrees to pay the costs and expenses incident to the performance of its obligations under this Agreement, whether or not the transactions contemplated hereby are consummated, including without limitation: (i) the preparation, printing or reproduction and filing with the Commission of the Registration Statement (including financial statements and exhibits thereto), the Prospectus and each Issuer Free Writing Prospectus, and each amendment or supplement to any of them; (ii) the printing (or reproduction) and delivery (including postage, air freight charges and charges for counting and packaging) of such copies of the Registration Statement, the Prospectus, and each Issuer Free Writing Prospectus, and all amendments or supplements to any of them, as may, in each case, be reasonably requested for use in connection with the offering and sale of the Shares; (iii) the preparation, printing, authentication, issuance and delivery of certificates for the Shares, including any stamp or transfer taxes in connection with the original issuance and sale of the Shares; (iv) the printing (or reproduction) and delivery of this Agreement, any blue sky memorandum and all other agreements or documents printed (or reproduced) and delivered in connection with the offering of the Shares; (v) the registration of the Shares under the Exchange Act and the listing of the Shares on Nasdaq; (vi) any registration or qualification of the Shares for offer and sale under the securities or blue sky laws of the several states (including filing fees and the reasonable fees and expenses of counsel for the Manager relating to such registration and qualification);

(vii) any filings required to be made with FINRA (including filing fees and the reasonable fees and expenses of counsel for the Manager relating to such filings); (viii) the transportation and other expenses incurred by or on behalf of Company representatives in connection with presentations to prospective purchasers of the Shares; (ix) the fees and expenses of the Company's accountants and the fees and expenses of counsel (including local and special counsel) for the Company; (x) the reasonable documented out-of-pocket expenses of the Manager, including the reasonable fees, disbursements and expenses of counsel for the Manager in connection with this Agreement and the Registration Statement and ongoing services in connection with the transactions contemplated hereunder, including the fees set forth in clause (vii) above, payable upon the execution of this Agreement, in an amount not to exceed \$50,000; and (xi) all other costs and expenses incident to the performance by the Company of its obligations hereunder.

6. Conditions to the Obligations of the Manager. The obligations of the Manager under this Agreement and any Terms Agreement shall be subject to (i) the accuracy of the representations and warranties on the part of the Company contained herein as of the Execution Time, each Representation Date, and as of each Applicable Time, Settlement Date and Time of Delivery, (ii) to the performance by the Company of its obligations hereunder and (iii) the following additional conditions:

(a) The Prospectus, and any supplement thereto, required by Rule 424 to be filed with the Commission have been filed in the manner and within the time period required by Rule 424(b) with respect to any sale of Shares; each Interim Prospectus Supplement shall have been filed in the manner required by Rule 424(b) within the time period required by Section 4(x) of this Agreement; any other material required to be filed by the Company pursuant to Rule 433(d) under the Securities Act, shall have been filed with the Commission within the applicable time periods prescribed for such filings by Rule 433; and no stop order suspending the effectiveness of the Registration Statement or any notice objecting to its use shall have been issued and no proceedings for that purpose shall have been instituted or threatened.

(b) The Manager shall have received the opinions of Company Counsel required to be delivered pursuant to Section 4(l) on or before the date on which such delivery of such opinions are required pursuant to Section 4(l).

(c) The Manager shall have received the opinion of IP Counsel or officer's certificate required to be delivered pursuant to Section 4(m) on or before each date on which such delivery of such opinion or officer's certificate is required pursuant to Section 4(m).

(d) The Company shall have furnished or caused to be furnished to the Manager, on every date specified in Section 4(k) of this Agreement, a certificate of the Company, signed by the Chairman of the Board or the Chief Executive Officer and the principal financial or accounting officer of the Company, dated as of such date, to the effect that the signers of such certificate have carefully examined the Registration Statement and the Prospectus and any supplements or amendments thereto and this Agreement and that:

(i) the representations and warranties of the Company in this Agreement are true and correct on and as of such date with the same effect as if made on such date and the Company has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to such date;

(ii) no stop order suspending the effectiveness of the Registration Statement or any notice objecting to its use has been issued and no proceedings for that purpose have been instituted or, to the Company's knowledge, threatened; and

(iii) since the date of the most recent financial statements included in the Prospectus, there has been no material adverse effect on the condition (financial or otherwise), business prospects, earnings, business or properties of the Company and its subsidiaries, if any, taken as a whole, whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated in the Prospectus.

(e) The Company shall have requested and caused the Accountants to have furnished to the Manager, on every date specified in Section 4 (n) hereof, letters (which may refer to letters previously delivered to the Manager), dated as of such date, in form and substance reasonably satisfactory to the Manager, confirming that they are independent accountants within the meaning of the Securities Act and the Exchange Act and the respective applicable rules and regulations adopted by the Commission thereunder and that they have performed a review of any unaudited interim financial information of the Company included or incorporated by reference in the Registration Statement and the Prospectus in accordance with Statement on Auditing Standards No. 100.

(f) Since the respective dates as of which information is disclosed in the Registration Statement and the Prospectus, except as otherwise stated therein, there shall not have been any change, or any development involving a prospective change, in or affecting the condition (financial or otherwise), earnings, business or properties of the Company and its subsidiaries, if any, taken as a whole, whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated in the Prospectus (exclusive of any amendment or supplement thereto) the effect of which is, in the sole judgment of the Manager, so material and adverse as to make it impractical or inadvisable to proceed with the offering or delivery of the Shares as contemplated by the Registration Statement (exclusive of any amendment thereof) and the Prospectus (exclusive of any amendment or supplement thereto).

(g) Between the Execution Time and the time of any sale of Shares through the Manager, there shall not have been any decrease in the rating of any of the Company's debt securities by any "nationally recognized statistical rating organization" (as defined for purposes of Rule 436 (g) under the Securities Act) or any notice given of any intended or potential decrease in any such rating or of a possible change in any such rating that does not indicate the direction of the possible change.

(h) FINRA shall not have raised any objection with respect to the fairness and reasonableness of the terms and arrangements under this Agreement.

(i) The Shares shall have been listed and admitted and authorized for trading on Nasdaq, and satisfactory evidence of such actions shall have been provided to the Manager.

(j) Prior to each Settlement Date and Time of Delivery, as applicable, the Company shall have furnished to the Manager such further information, certificates and documents as the Manager may reasonably request.

The documents required to be delivered by this Section 6 shall be delivered at the office of Latham & Watkins LLP, counsel for the Manager, at 12670 High Bluff Drive, San Diego, California 92130, on each such date as provided in this Agreement.

7. Indemnification and Contribution.

(a) The Company agrees to indemnify and hold harmless the Manager, the directors, officers, employees, affiliates and agents of the Manager and each person who controls the Manager within the meaning of either the Securities Act or the Exchange Act against any and all losses, claims, damages or liabilities, joint or several, to which they or any of them may become subject under the Securities Act, the Exchange Act or other Federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in the registration statement for the registration of the Shares as originally filed or in any amendment thereof, or in the Prospectus, or any Issuer Free Writing Prospectus or in any amendment thereof or supplement thereto or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary in order to make the statements therein not misleading, and agrees to reimburse each such indemnified party, as incurred, for any documented legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon any such untrue statement or alleged untrue statement or omission or alleged omission made therein in reliance upon and in conformity with written information furnished to the Company by the Manager specifically for inclusion therein. This indemnity agreement will be in addition to any liability that the Company may otherwise have. The Company acknowledges that the last sentence of the first paragraph under the heading "Plan of Distribution" and the paragraph under the heading "Plan of Distribution – Other Relationships" in the Prospectus Supplement constitute the only information furnished in writing by or on behalf of the Manager for inclusion in the Prospectus Supplement, the Prospectus or any Issuer Free Writing Prospectus.

(b) The Manager agrees to indemnify and hold harmless the Company, each of its directors, each of its officers who signs the Registration Statement, and each person who controls the Company within the meaning of either the Securities Act or the Exchange Act,

to the same extent as the foregoing indemnity from the Company to the Manager, but only with reference to written information relating to the Manager furnished to the Company by the Manager specifically for inclusion in the documents referred to in the foregoing indemnity. This indemnity agreement will be in addition to any liability which the Manager may otherwise have.

(c) Promptly after receipt by an indemnified party under this Section 7 of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 7, notify the indemnifying party in writing of the commencement thereof; but the failure so to notify the indemnifying party (i) will not relieve it from liability under paragraph (a) or (b) above unless and to the extent it did not otherwise learn of such action and such failure results in the forfeiture by the indemnifying party of substantial rights and defenses and (ii) will not, in any event, relieve the indemnifying party from any obligations to any indemnified party other than the indemnification obligation provided in paragraph (a) or (b) above. The indemnifying party shall be entitled to appoint counsel of the indemnifying party's choice at the indemnifying party's expense to represent the indemnified party in any action for which indemnification is sought (in which case the indemnifying party shall not thereafter be responsible for the fees and expenses of any separate counsel retained by the indemnified party or parties except as set forth below); provided, however, that such counsel shall be reasonably satisfactory to the indemnified party. Notwithstanding the indemnifying party's election to appoint counsel to represent the indemnified party in an action, the indemnified party shall have the right to employ separate counsel (including local counsel), and the indemnifying party shall bear the reasonable fees, costs and expenses of such separate counsel if (i) the use of counsel chosen by the indemnifying party to represent the indemnified party would, based on the advice of counsel, present such counsel with a conflict of interest, (ii) the actual or potential defendants in, or targets of, any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded, based on the advice of counsel, that there may be legal defenses available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party, (iii) the indemnifying party shall not have employed counsel reasonably satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of the institution of such action or (iv) the indemnifying party shall authorize the indemnified party to employ separate counsel at the expense of the indemnifying party. An indemnifying party will not, without the prior written consent of the indemnified parties (such consent not to be unreasonably withheld, conditioned or delayed), settle or compromise or consent to the entry of any judgment with respect to any pending or threatened claim, action, suit or proceeding in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified parties are actual or potential parties to such claim or action) unless such settlement, compromise or consent: (i) includes an unconditional release of each indemnified party from all liability arising out of such claim, action, suit or proceeding and (ii) does not include an admission of fault.

(d) In the event that the indemnity provided in paragraph (a), (b) or (c) of this Section 7 is unavailable to or insufficient to hold harmless an indemnified party for any

reason, the Company and the Manager agree to contribute to the aggregate losses, claims, damages and liabilities (including legal or other expenses reasonably incurred in connection with investigating or defending the same) (collectively “ Losses ”) to which the Company and the Manager may be subject in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and by the Manager on the other from the offering of the Shares. If the allocation provided by the immediately preceding sentence is unavailable for any reason, the Company and the Manager severally shall contribute in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and of the Manager on the other in connection with the statements or omissions which resulted in such Losses as well as any other relevant equitable considerations. Benefits received by the Company shall be deemed to be equal to the total net proceeds from the offering (before deducting expenses) received by it, and benefits received by the Manager shall be deemed to be equal to the total gross compensation from the offering (before deducting expenses) received by it, in each case as determined by this Agreement or any applicable Terms Agreement. Relative fault shall be determined by reference to, among other things, whether any untrue or any alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information provided by the Company on the one hand or the Manager on the other, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Company and the Manager agree that it would not be just and equitable if contribution were determined by pro rata allocation or any other method of allocation which does not take account of the equitable considerations referred to above. Notwithstanding the foregoing provisions of this paragraph (d), in no event shall the Manager be required to contribute any amount in excess of the amount of gross compensation (before deducting expenses) received by the Manager under this Agreement. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 7, each person who controls the Manager within the meaning of either the Securities Act or the Exchange Act and each director, officer, employee, affiliate and agent of the Manager shall have the same rights to contribution as the Manager, and each person who controls the Company within the meaning of either the Securities Act or the Exchange Act, each officer of the Company who shall have signed the Registration Statement and each director of the Company shall have the same rights to contribution as the Company, subject in each case to the applicable terms and conditions of this paragraph (d).

8. Termination .

(a) The Company shall have the right, by giving written notice as hereinafter specified, to terminate the provisions of this Agreement relating to the solicitation of offers to purchase the Shares in its sole discretion at any time. Any such termination shall be without liability of any party to any other party except that (i) if Shares have been sold through the Manager for the Company, then Section 4(t) shall remain in full force and effect, (ii) with respect to any sale of Shares through the Manager for the Company completed prior to the Company giving written notice of termination, the obligations of the Company, including in respect of compensation of the Manager, shall remain in full force and effect notwithstanding the termination and (iii) the provisions of Sections 2, 5, 7, 9, 10, 12 and 15 of this Agreement shall remain in full force and effect notwithstanding such termination.

(b) The Manager shall have the right, by giving written notice as hereinafter specified, to terminate the provisions of this Agreement relating to the solicitation of offers to purchase the Shares in its sole discretion at any time. Any such termination shall be without liability of any party to any other party except that the provisions of Sections 2, 5, 7, 9, 10, 12 and 15 of this Agreement shall remain in full force and effect notwithstanding such termination.

(c) This Agreement shall remain in full force and effect unless terminated pursuant to Sections 8(a) or (b) above or otherwise by mutual agreement of the parties; provided that any such termination by mutual agreement shall in all cases be deemed to provide that Sections 2, 5, 7 and 9 shall remain in full force and effect.

(d) Any termination of this Agreement shall be effective on the date specified in such notice of termination; provided that such termination shall not be effective until the close of business on the date of receipt of such notice by the Manager or the Company, as the case may be. If such termination shall occur prior to the Settlement Date or Time of Delivery for any sale of the Shares, such sale shall settle in accordance with the provisions of Section 3(a)(vii) of this Agreement.

(e) In the case of any purchase of Shares by the Manager pursuant to a Terms Agreement, the obligations of the Manager pursuant to such Terms Agreement shall be subject to termination, in the absolute discretion of the Manager, by notice given to the Company prior to the Time of Delivery relating to such Shares, if at any time prior to such delivery and payment (i) trading in the Company's Common Stock shall have been suspended by the Commission or Nasdaq or trading in securities generally on the NYSE or Nasdaq shall have been suspended or limited or minimum prices shall have been established on either of such exchanges, (ii) a banking moratorium shall have been declared either by Federal or New York State authorities or (iii) there shall have occurred any outbreak or escalation of hostilities, declaration by the United States of a national emergency or war, or other calamity or crisis the effect of which on financial markets is such as to make it, in the sole judgment of the Manager, impractical or inadvisable to proceed with the offering or delivery of the Shares as contemplated by the Prospectus (exclusive of any amendment or supplement thereto).

9. Representations and Indemnities to Survive. The respective agreements, representations, warranties, indemnities and other statements of the Company or its officers and of the Manager set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation made by the Manager or the Company or any of the officers, directors, employees, affiliates, agents or controlling persons referred to in Section 7 hereof, and will survive delivery of and payment for the Shares.

10. Notices. All communications hereunder will be in writing and effective only on receipt, and, if sent to the Manager, will be mailed, delivered or telefaxed to the Citigroup Global Markets Inc. General Counsel (fax no.: (646) 291-1469) and confirmed to the General Counsel, Citigroup Global Markets Inc., at 388 Greenwich Street, New York, New York, 10013, Attention: General Counsel; or, if sent to the Company, will be mailed or delivered to it at Tocagen Inc., 4242 Campus Point Court, Suite 500, San Diego, California, 92121 attention of the Legal Department, with a copy sent via email to Karen Deschaine Anderson, Cooley LLP, at kanderson@cooley.com.

11. Successors. This Agreement will inure to the benefit of and be binding upon the parties hereto and their respective successors and the officers, directors, employees, agents and controlling persons referred to in Section 7 hereof, and no other person will have any right or obligation hereunder.

12. No fiduciary duty. The Company hereby acknowledges that (a) the purchase and sale of the Shares pursuant to this Agreement is an arm's-length commercial transaction between the Company, on the one hand, and the Manager and any affiliate through which it may be acting, on the other, (b) the Manager is acting solely as sales agent and/or principal in connection with the purchase and sale of the Company's securities and not as a fiduciary of the Company and (c) the Company's engagement of the Manager in connection with the offering and the process leading up to the offering is as independent contractors and not in any other capacity. Furthermore, the Company agrees that it is solely responsible for making its own judgments in connection with the offering (irrespective of whether the Manager has advised or is currently advising the Company on related or other matters). The Company agrees that it will not claim that the Manager has rendered advisory services of any nature or respect, or owe an agency, fiduciary or similar duty to the Company, in connection with such transaction or the process leading thereto.

13. Jurisdiction. The Company agrees that any suit, action or proceeding against the Company brought by the Manager, the directors, officers, employees, affiliates and agents of the Manager, or by any person who controls the Manager, arising out of or based upon this Agreement or the transactions contemplated hereby may be instituted in any State or U.S. federal court in The City of New York and County of New York, and waives any objection which it may now or hereafter have to the laying of venue of any such proceeding, and irrevocably submits to the non-exclusive jurisdiction of such courts in any suit, action or proceeding. The Company hereby appoints the General Counsel of the Company as its authorized agent (the "Authorized Agent") upon whom process may be served in any suit, action or proceeding arising out of or based upon this Agreement or the transactions contemplated herein that may be instituted in any State or U.S. federal court in The City of New York and County of New York, by the Manager, the directors, officers, employees, affiliates and agents of the Manager, or by any person who controls the Manager, and expressly accepts the non-exclusive jurisdiction of any such court in respect of any such suit, action or proceeding. The Company hereby represents and warrants that the Authorized Agent has accepted such appointment and has agreed to act as said agent for service of process, and the Company agrees to take any and all action, including the filing of any and all documents that may be necessary to continue such appointment in full force and effect as aforesaid. Service of process upon the Authorized Agent shall be deemed, in every respect, effective service of process upon the Company. Notwithstanding the foregoing, any action arising out of or based upon this Agreement may be instituted by the Manager, the directors, officers, employees, affiliates and agents of the Manager, or by any person who controls the Manager, in any court of competent jurisdiction in Delaware.

14. Integration. This Agreement and any Terms Agreement supersede all prior agreements and understandings (whether written or oral) between the Company and the Manager with respect to the subject matter hereof. For the avoidance of doubt, neither this Agreement nor any Terms Agreement will supersede, terminate or otherwise relieve either party of its obligations under any non-disclosure, confidentiality or similar agreement between the parties.

15. Applicable Law. This Agreement and any Terms Agreement will be governed by and construed in accordance with the laws of the State of New York applicable to contracts made and to be performed within the State of New York.

16. Waiver of Jury Trial. The Company hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement, any Terms Agreement or the transactions contemplated hereby or thereby.

17. Counterparts. This Agreement and any Terms Agreement may be signed in one or more counterparts, each of which shall constitute an original and all of which together shall constitute one and the same agreement.

18. Headings. The section headings used in this Agreement and any Terms Agreement are for convenience only and shall not affect the construction hereof.

19. Definitions. The terms that follow, when used in this Agreement and any Terms Agreement, shall have the meanings indicated.

“Applicable Time” shall mean, with respect to any Shares, the time of sale of such Shares pursuant to this Agreement or any relevant Terms Agreement.

“Base Prospectus” shall mean the base prospectus referred to in Section 2(a) above contained in the Registration Statement at the Execution Time.

“Business Day” shall mean any day other than a Saturday, a Sunday or a legal holiday or a day on which banking institutions or trust companies are authorized or obligated by law to remain closed in New York City.

“Commission” shall mean the Securities and Exchange Commission.

“Effective Date” shall mean each date and time that the Registration Statement, any post-effective amendment or amendments thereto and any Rule 462(b) Registration Statement became or becomes effective.

“Exchange Act” shall mean the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Execution Time” shall mean the date and time that this Agreement is executed and delivered by the parties hereto.

“Free Writing Prospectus” shall mean a free writing prospectus, as defined in Rule 405.

“Interim Prospectus Supplement” shall mean the prospectus supplement relating to the Shares prepared and filed pursuant to Rule 424(b) from time to time as provided by Section 4(x) of this Agreement.

“Issuer Free Writing Prospectus” shall mean an issuer free writing prospectus, as defined in Rule 433.

“Prospectus” shall mean the Base Prospectus, as supplemented by the Prospectus Supplement and the most recently filed Interim Prospectus Supplement (if any).

“Prospectus Supplement” shall mean the most recent prospectus supplement relating to the Shares that was first filed pursuant to Rule 424 (b) at or prior to the Execution Time.

“Registration Statement” shall mean the registration statement referred to in Section 2(a) above, including exhibits and financial statements and any prospectus supplement relating to the Shares that is filed with the Commission pursuant to Rule 424(b) and deemed part of such registration statement pursuant to Rule 430B, as amended on each Effective Date and, in the event any post-effective amendment thereto or any Rule 462(b) Registration Statement becomes effective, shall also mean such registration statement as so amended or such Rule 462(b) Registration Statement, as the case may be.

“Rule 153”, “Rule 158”, “Rule 164”, “Rule 172”, “Rule 405”, “Rule 415”, “Rule 424”, “Rule 430B”, “Rule 433” and “Rule 462” refer to such rules under the Securities Act.

“Rule 462(b) Registration Statement” shall mean a registration statement and any amendments thereto filed pursuant to Rule 462(b) relating to the offering covered by the registration statement referred to in Section 1(a) hereof.

“Securities Act” shall mean the Securities Act of 1933, as amended, and the rules and regulations of the Commission promulgated thereunder.

If the foregoing is in accordance with your understanding of our agreement, please sign and return to us the enclosed duplicate hereof, whereupon this letter and your acceptance shall represent a binding agreement among the Company and the Manager.

Very truly yours,

Tocagen Inc.

By: /s/ Mark G. Foletta

Name: Mark G. Foletta

Title: EVP; CFO

The foregoing Agreement is hereby confirmed and accepted as of the date first written above.

By: Citigroup Global Markets Inc.

By: /s/ Bradley B. Wolff

Name: Bradley B. Wolff

Title: Managing Director - Healthcare Group

SCHEDULE I

Free Writing Prospectuses

None.

TOCAGEN INC.

Common Stock

TERMS AGREEMENT

_____, 20 __

Citigroup Global Markets Inc.
388 Greenwich Street
New York, New York, 10013

Dear Sirs:

Tocagen Inc. (the “Company”) proposes, subject to the terms and conditions stated herein and in the Equity Distribution Agreement, dated November 21, 2018 (the “Equity Distribution Agreement”), between the Company and Citigroup Global Markets Inc., to issue and sell to Citigroup Global Markets Inc. the securities specified in the Schedule I hereto (the “Purchased Shares”).

Each of the provisions of the Equity Distribution Agreement not specifically related to the solicitation by Citigroup Global Markets Inc., as agent of the Company, of offers to purchase securities is incorporated herein by reference in its entirety, and shall be deemed to be part of this Terms Agreement to the same extent as if such provisions had been set forth in full herein. Each of the representations and warranties set forth therein shall be deemed to have been made at and as of the date of this Terms Agreement and the Time of Delivery, except that each representation and warranty in Section 2 of the Equity Distribution Agreement which makes reference to the Prospectus (as therein defined) shall be deemed to be a representation and warranty as of the date of the Equity Distribution Agreement in relation to the Prospectus, and also a representation and warranty as of the date of this Terms Agreement and the Time of Delivery in relation to the Prospectus as amended and supplemented to relate to the Purchased Shares.

An amendment to the Registration Statement (as defined in the Equity Distribution Agreement), or a supplement to the Prospectus, as the case may be, relating to the Purchased Shares, in the form heretofore delivered to the Manager is now proposed to be filed with the Securities and Exchange Commission.

Subject to the terms and conditions set forth herein and in the Equity Distribution Agreement which are incorporated herein by reference, the Company agrees to issue and sell to Citigroup Global Markets Inc. and the latter agrees to purchase from the Company the number of shares of the Purchased Shares at the time and place and at the purchase price set forth in the Schedule I hereto.

[Signatures appear on next page]

If the foregoing is in accordance with your understanding, please sign and return to us a counterpart hereof, whereupon this Terms Agreement, including those provisions of the Equity Distribution Agreement incorporated herein by reference, shall constitute a binding agreement between the Manager and the Company.

Tocagen Inc.

By: _____
Name:
Title:

ACCEPTED as of the date
first written above.

Citigroup Global Markets Inc.

By: _____
Name:
Title:

Title of Purchased Shares

Common Stock, par value \$0.001 per share

Number of Shares of Purchased Shares:

[Price to Public:]

Purchase Price by Citigroup Global Markets Inc.:

Method of and Specified Funds for Payment of Purchase Price:

By wire transfer to a bank account specified by the Company in same day funds.

Method of Delivery:

Free delivery of the Shares to the Manager's account at The Depository Trust Company in return for payment of the purchase price.

Time of Delivery:

Closing Location:

Documents to be Delivered:

The following documents referred to in the Equity Distribution Agreement shall have been delivered as a condition to the closing at the Time of Delivery:

- (1) The opinions referred to in Section 4(l).
- (2) The opinion referred to in Section 4(m).
- (3) The accountants' letter referred to in Section 4(n).
- (4) The officers' certificate referred to in Section 4(k).
- (5) Such other documents as the Manager shall reasonably request.