# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

# **SCHEDULE 14A**

(Rule 14a-101)

## INFORMATION REQUIRED IN PROXY STATEMENT

### **SCHEDULE 14A INFORMATION**

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

File	ed by the Registrant ⊠ ed by a Party other than the Registrant □ eck the appropriate box:
	Preliminary Proxy Statement Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2)) Definitive Proxy Statement Definitive Additional Materials Soliciting Material Pursuant to §240.14a-12
	AgeX Therapeutics, Inc.
	(Name of Registrant as Specified in Its Charter)
	(Name of Person(s) Filing Proxy Statement if other than the Registrant)
	/ment of Filing Fee (Check the appropriate box):  No fee required.  Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
	(1) Title of each class of securities to which transaction applies:
	(2) Aggregate number of securities to which transaction applies:
	(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (Set forth the amount on which the filing fee is calculated and state how it was determined):
	(4) Proposed maximum aggregate value of transaction:
	(5) Total fee paid:
	Fee paid previously with preliminary materials.  Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the form or schedule and the date of its filing.  (1) Amount previously paid:
	(2) Form, schedule or registration statement no.:
	(3) Filing party:
	(4) Date filed:



November 24, 2020

Dear Fellow Stockholders,

965 Atlantic Avenue, Suite 101 Alameda, CA 94501 T: 510-671-8370, F: 510-671-8619 www.agexinc.com

Every year we look forward to this opportunity to write a letter accompanying the Annual Meeting of Stockholders of AgeX Therapeutics, Inc. This year, in the following letter, our Chairman Dr. Greg Bailey will provide the business update and plans for the coming year. To put these plans in perspective, let's consider the

status of the regenerative medicine industry and how the proprietary technologies belonging to AgeX provide us with a competitive edge.

Regenerative medicine: The right prescription for an aging population

Healthcare in the year 2020 was in numerous respects defined by the SARS-CoV-2 pandemic. However, an even larger threat to the population of the United States is that of aging and associated chronic degenerative disease. It is estimated that chronic disease accounts for approximately 80% of our health care expenditures. So, novel effective therapies are desperately needed to address this large and growing demand. AgeX's technology platform is designed to potentially provide a means of manufacturing revolutionary new therapeutic regimens for this market. These fall into two categories: (1) Cell-based regenerative therapies; and (2) the induction of intrinsic tissue regeneration which we call iTR. Let's consider the implications of these in turn.

In the course of aging, organs in our bodies wear out due to the aging of the particular cells that make up that tissue. We can think for instance of the aging of the cells in our blood vessels that can lead to a heart attack, the leading cause of death in the United States, or the age-related change in our metabolism that can lead to central obesity and type-2 diabetes. The injection of young replacement cells that could restore youthful function for these and other degenerative conditions of aging are greatly needed by the medical establishment. As Dr. Bailey describes in the accompanying letter, AgeX enjoys a proprietary set of technologies that are critical to manufacturing the young regenerative cells that may make these products a commercial reality.

We believe that in the long-term, iTR will be viewed as an historic advance in healthcare. Unlocking the ability of organs in the body to scarlessly regenerate was only a dream ten years ago, but now, advances in medical research have allowed AgeX scientists to file patents on these potentially revolutionary approach to healing patients with chronic degenerative disease.

We would like to thank you for your support and joining with us in the quest to improve the quality of life of millions of people around the world. We hope you will join us for our Annual Meeting of Stockholders and look forward to updating you on our continued progress.

Sincerely,

President & CEO



November 24, 2020

Dear AgeX Stockholders,

965 Atlantic Avenue, Suite 101 Alameda, CA 94501 T: 510-671-8370, F: 510-671-8619

www.agexinc.com

In 2020, our second full year as a public company and with the pandemic, we have reorganized AgeX with emphasis on product development, starting with proof of concepts in our two mega themes: cell therapies to generate and deliver new cells to patients and our revolutionary induced Tissue Regeneration (iTR<sup>TM</sup>) platform. As you will read, we have created two unique divisions: one focused on cell therapy and the other focused on tissue regeneration. These two divisions will have their own dedicated management teams to move their product candidates forward toward the clinic and into human trials.

#### **Cell Therapy Technology Platform**

AgeX cell therapy technologies could be transformative for the entire cell therapy industry. First, and the most important of these technologies, is our immunotolerance UniverCyte<sup>TM</sup> platform. This technology is designed to engineer universal donor cells that may be transplanted in patients without the need for concurrent administration of the potent immunosuppressive drugs that can have serious side-effects, including an increased risk of cancer and infection. Second is our PureStem® platform for deriving and manufacturing allogeneic, off-the-shelf, clonal, young therapeutic cells, which should have low manufacturing costs and be industrially scalable. Third is our highly regarded ESI brand pluripotent stem cell lines, which may be used as a basic cell line source for generating potentially any cell type in the human body.

Given the breadth of opportunity for our cell therapy technologies, we have introduced a licensing model to complement our in-house therapeutic product development plans. The concept here is to license our technologies and cell lines to third parties and to collect ongoing royalties and milestone payments as those licensees move new therapies through development and commercialization. This model will de-risk product development for AgeX, reduce our capital needs, and augment our revenue generating opportunities. So far during 2020 we have signed six agreements with industry and academia under this model. These agreements span all three of our cell therapy technology platforms: UniverCyte<sup>TM</sup>; PureStem<sup>®</sup>; and ESI cell lines. These agreements may lead to the development of new cell therapies utilizing AgeX technology platforms by our licensees and collaborators, with potential future income streams to AgeX. These new agreements highlight the value others see in our technology platforms. In furtherance of one of those agreements, next year we plan to form a new development company with researchers from UC Irvine to pursue clinical development and commercialization of cell therapies for Huntington's Disease and other neurological disorders. We will continue to pursue our licensing and collaboration model and hope to announce further such agreements in the future.

Over the last year, we have worked hard to achieve certain goals to set the fundamental basis to create shareholder value going forward:

- In January, AgeX entered into a research collaboration with a Japanese biopharma company, which will test our UniverCyte technology to engineer hypoimmunogenic or universal cells. AgeX will have rights to use any improvements to its UniverCyte technology developed through the research and may negotiate commercial licensing arrangements for the use of UniverCyte by the Japanese company to produce cellular products for therapeutic and commercial purposes.
- In January, AgeX entered into a sponsored research agreement with the University of California at Irvine for the derivation of neural stem cells using AgeX's PureStem technology for Huntington's Disease, and potentially other neurological disorders such as Parkinson's, Alzheimer's, and stroke. The work is being conducted in the laboratory of Leslie Thompson, Ph.D., Chancellor's Professor of Psychiatry & Human Behavior and Neurobiology & Behavior. The collaboration builds on UC Irvine's research in neural stem cell transplantation for Huntington's Disease, including safety and efficacy animal data, which may support an investigational new drug (IND) application to the U.S. Food and Drug Administration (FDA) as early as in 2021. The collaboration includes an opportunity for AgeX to organize a company to be jointly owned with Professor Thompson and other researchers to pursue clinical development and commercialization of cell therapies derived using licensed inventions arising from the research program, as well as certain patent pending technology for neural stem cell derivation, and certain technical data, including animal data, to support IND submissions.

- In March, AgeX Licensee ImStem Biotechnology, Inc., a biopharmaceutical company developing embryonic stem cell (ESC)-derived mesenchymal stem cells (MSCs), received FDA IND clearance to begin a clinical trial of its MSC product IMS001 in multiple sclerosis. AgeX's embryonic stem cell line ESI-053 was used by ImStem to derive IMS001, which is believed to be the first MSC product derived from an embryonic stem cell line to be accepted for a human trial by the FDA. This year, AgeX sublicensed to ImStem the right to use ESI-053 for commercial purposes for the treatment of multiple sclerosis or other autoimmune diseases.
- In October, AgeX entered into second sublicense agreement with ImStem. This non-exclusive, royalty-bearing sublicense permits the use of AgeX's ESI-053 stem cell line in the development of ImStem's IMS001 for the treatment of COVID-19 and acute respiratory distress syndrome (ARDS) from other causes. ImStem will endeavor to file one or more IND applications for IMS001 in COVID-19 and/or ARDS with the FDA or an equivalent EU regulatory agency within 18 months. AgeX will be entitled to receive revenues in the form of royalties on the sale of IMS001, if successfully developed by ImStem and approved for marketing by the FDA or foreign regulatory authorities, as well as a share of certain other revenues that ImStem may receive in connection with the development or commercialization of IMS001 in COVID-19 and ARDS.
- In May, AgeX entered into a research license with Sernova Corp., a clinical-stage regenerative medicine therapeutics company, in which Sernova will utilize AgeX's UniverCyte<sup>TM</sup> technology to generate immune-protected universal therapeutic cells for use in combination with Sernova's Cell Pouch<sup>TM</sup> for the treatment of type I diabetes and hemophilia A. Sernova has been granted a time-limited, non-exclusive research license by AgeX. A commercial license for Sernova to utilize UniverCyte<sup>TM</sup> for therapeutic and commercial purposes may be negotiated pending successful study outcomes.
- In June, AgeX entered into a Manufacturing, Marketing, and Distribution Agreement with Pluristyx, Inc., an advanced therapy tools and services company serving customers in the rapidly growing fields of regenerative medicine and cellular and gene therapies, under which Pluristyx will perform certain services to manufacture, market and distribute on AgeX's behalf research-grade and clinical-grade AgeX ESI brand stem cells for therapeutic applications. Academic and biopharma organizations will need to obtain separate commercial licenses from AgeX in order to advance their cellular product candidates generated from AgeX ESI cell lines into human clinical trials and commercialization.
- In September, AgeX and its former parent Lineage Cell Therapeutics, Inc., a clinical-stage biotechnology company developing novel cell therapies for unmet medical needs, and ES Cell International Pte Ltd., a subsidiary of Lineage, announced the broadening of their collaborative relationship with regard to ESI stem cell lines. The amendment secures AgeX independence to license out ESI cell lines as part of its collaboration and licensing model and to build ESI cell lines as a to-go-to source for deriving cell based therapeutics. The ESI stem cell lines are distinguished as the first clinical-grade human pluripotent stem cell lines created under current Good Manufacturing Practice (cGMP) as described in *Cell Stem Cell* (2007;1:490-4). They are listed on the National Institutes of Health (NIH) Stem Cell Registry and are among the best characterized and documented stem cell lines in the world. ESI cells are among only a few pluripotent stem cell lines from which a derived cell therapy product candidate has been granted FDA IND clearance for human studies.

To optimize shareholder value, we have a number of key goals for the coming year and beyond. We plan to work toward engineering a UniverCyte<sup>TM</sup> modified pluripotent stem cell line, proving that it is hypoimmunogenic/universal in lab and animal models, and creating a UniverCyte<sup>TM</sup> modified pluripotent stem cell cGMP grade master cell bank, from which any human cell type could potentially be derived by either us for our own in-house product development programs or by third parties to meet their needs. If we or our licensees can demonstrate that such a universal cell line engineered using our UniverCyte<sup>TM</sup> technology does not need immunosuppression, it may pave the way for extraordinary cell therapy products. As you can imagine this would completely change the whole cell therapy industry by allowing transplantation of third party sourced cells into all patients without the need for powerful immunosuppressant drugs, which are associated with serious side effects, including infections and cancers, as well as kidney and liver toxicity.

Our **PureStem**® progenitor cell lines could have eight potential advantages compared to other adult stem cell or pluripotent stem cell lines, including lower manufacturing costs; industrial scalability; off-the-shelf usage; high purity; non-tumorgenicity; young in age, so they are not prone to the disadvantages associated with older cells; aptitude for permanent cell engraftment; and potential to manufacture any human cell type.

AgeX's two in-house PureStem® product candidates, AgeX-BAT1 and AgeX-VASC1, target an unmet medical need and are for highly prevalent diseases of aging, with multi-billion-dollar markets. Our lead product candidate AgeX-BAT1 is brown fat progenitor cells for the potential treatment of type II diabetes, morbid obesity and metabolic syndrome. Our second in-house product candidate AgeX-VASC1 is vascular endothelial progenitor cells for the treatment of tissue ischemia, such as peripheral vascular disease, including diabetic foot ulcers, and potentially for cardiac ischaemia. In 2021, we are aiming to work to generate proof-of-concept animal data for both BAT1 and VASC1 through outside collaborations.

#### Reverse Bioengineering, Inc.

In 2019, we announced incorporation of Reverse Bioengineering, Inc. or "Reverse Bio" as a subsidiary to develop our revolutionary partial cellular reprogramming platform induced Tissue Regeneration (iTR<sup>TM</sup>). In the past few years, it has become clear that partial cellular reprogramming to reverse the age of cells is set to open up a whole new field of pioneering therapeutics. We believe that iTR offers a powerful new modality to treat age-related degenerative diseases by reversing developmental aging in a tissue, thereby unlocking an innate capacity of tissues to regenerate scarlessly. Using iTR<sup>TM</sup> partial cellular reprogramming technology, aged or diseased tissues would be repaired inside the body by reprogramming the cell's epigenetic landscape without loss of cellular identity. This reactivates the innate power of regeneration possessed by embryos at the very beginning of life.

We believe partial cellular reprogramming will become one of the biggest sectors in biotech in the coming years and be transformational for regenerative medicine and humanity, and we are positioning Reverse Bio to be a leader in 2021. Our plan is for Reverse Bio to build its own dedicated team to focus on iTR<sup>TM</sup>. The team's first mandate is to raise dedicated capital for our iTR<sup>TM</sup> technology. The money will be used for a proof-of-concept trial in an animal model as quickly as possible.

We believe Reverse Bio will have significant competitive advantage over competitors due to our extensive experience and data from research into cellular immortality and regenerative biology, and our expertise in pluripotency and bioinformatics. Our research has established markers of regenerative cell states by comparing cells in the first stages of life with those in old age, and we have filed the first patents teaching the therapeutic use of partial reprogramming.

To build the foundations for success at Reverse Bio, our focus has been:

- Identifying a lead indication for our first iTR™ human regenerative medicine product candidate, that we aim to leverage into future product programs for multiple indications
- Building a development plan for our first iTR<sup>TM</sup> indication, with dedicated focus on expeditiously delivering proof-of-concept in an animal model and working to support a future IND submission
- Strengthening the leadership team with a key hire to focus on fund raising and execution of our product development plan, working alongside Dr. Michael West
- Putting in place a team of world-class experimental collaborators and key pre-clinical, clinical, and regulatory advisors
- Initiating a financing plan for Reverse Bio to support its product development program

Once financed we plan to advance our iTR<sup>TM</sup> technology to proof of concept within 12 months, we are gaining significant momentum and are excited for the potential of Reverse Bio.

In summary, 2020 was a dramatic year for repositioning AgeX to be a leader in two of the most compelling areas of biotech. To augment growth, we will also look for accretive acquisition opportunities that would substantially increase shareholder value, and make our product offering even more robust, like the UniverCyte<sup>TM</sup> acquisition we made in 2018, and get us into the clinic and human trials as soon as possible. In the last two years, we have had growing pains but we feel that 2021 will see the results of our two-year efforts with significant readouts on two major proofs of concepts in cell therapy with UniverCyte<sup>TM</sup> and in iTR<sup>TM</sup> proof of concepts in animals and the success of our licensing initiatives. Our goal moving forward beyond 2021 is to have therapies in human trials either through our own in-house programs or through programs conducting by licensees of our technologies.

We appreciate your patience and your support and the dedication of our employees. We invite you to join us for the Annual Meeting of Stockholders on December 28. For those of you who cannot attend in person this year, we have made arrangements to allow you to attend and participate at the Annual Meeting online if you wish at <a href="https://web.lumiagm.com/268644388">https://web.lumiagm.com/268644388</a>. If you wish to attend the Annual Meeting in person or online you will need to gain admission in the manner described in the Proxy Statement that accompanies this letter.

Sincerely,

Greg Bailey, M.D. Chairman of the Board