

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2021

OR

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

For the transition period from _____ to _____

Commission file number 1-38519

AgeX Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

82-1436829

(I.R.S. Employer
Identification No.)

1101 Marina Village Parkway, Suite 201

Alameda, California 94501

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: **(510) 671-8370**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of exchange on which registered
Common Stock, par value \$0.0001 per share	AGE	NYSE American

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Non-accelerated filer

Accelerated filer

Smaller reporting company

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 to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act): Yes No

The approximate aggregate market value of shares of voting common stock held by non-affiliates computed by reference to the price at which shares of common stock were last sold as of June 30, 2021 was \$32.5 million. Shares held by each executive officer and director and by each person who beneficially owns more than 5% of the outstanding common stock have been excluded in that such persons may under certain circumstances be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 14, 2022, there were outstanding 37,943,064 shares of common stock, par value \$0.0001 per share.

DOCUMENTS INCORPORATED BY REFERENCE

None

AgeX Therapeutics, Inc.
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Summary of Risk Factors

Below is a summary of the material factors that make an investment in our common shares speculative or risky. This summary does not address all of the risks that we face. Additional discussion of the risks summarized in this risk factor summary, and other risks that we face, can be found below under the heading “Risk Factors” in Item 1A of Part I of this Report and should be carefully considered, together with other information in this Report and our other filings with the Securities and Exchange Commission (“Commission”) before making investment decisions regarding our common shares.

Risks Related to Our Financial Condition and Capital Resources

- We are a discovery-stage development company with limited capital resources and have incurred operating losses since our inception. We anticipate that we will incur continued losses for the foreseeable future and will need to continue to raise capital to finance our operations, and we do not know if we will ever attain profitability.
- We need additional financing to execute our operating plan and continue to operate as a going concern.
- Our ability to borrow additional funds from the line of credit under our 2022 Secured Convertible Promissory Note with Juvenescence is subject to Juvenescence’s discretion in funding our requests for loans, and all of the loans are collateralized by our assets, including shares of our subsidiaries.
- The terms of our Secured Note and Security Agreement with Juvenescence could make it more difficult for us to raise additional capital from other sources.
- Raising additional capital may cause dilution to our stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.

Risks Related to Our Business Operations

- Due to our limited financial resources, we have reduced our staffing, eliminated our of our research laboratory facilities, and eliminated in-house research and product development work. We will seek opportunities to outsource or license product development and commercialization but there is no assurance that we will be able to do so successfully.
- We may expend our limited resources to pursue one or more particular product candidates or indications and fail to pursue product candidates or indications that may be more profitable or for which there is a greater likelihood of success
- We have not tested any of our product candidates in clinical trials. Success in early development and preclinical studies or clinical trials may not be indicative of results obtained in later preclinical studies and clinical trials.
- Our choice of product candidates and our development plans for our product candidates are subject to change based on a variety of factors, and if we abandon development of a product candidate we may not be able to develop or acquire a replacement product candidate.
- We may determine to expand our organization and obtain laboratory facilities if we are able to raise sufficient capital to do so, and we may experience difficulties in managing this growth, which could disrupt our operations.
- The commercial success of any of our current or future product candidates will depend upon the degree of market acceptance by physicians, patients, third-party payors, and others in the medical community.
- If the market opportunities for our product candidates are smaller than we believe they are, we may not meet our revenue expectations and, even assuming approval of a product candidate, our business may suffer.
- We will face risks related to the manufacture of medical products for any product candidates that we develop.
- If the market opportunities for our product candidates are smaller than we believe they are, we may not meet our revenue expectations and, even assuming approval of a product candidate, our business may suffer.
- Any cell-based products that receive regulatory approval may be difficult and expensive to manufacture on a commercial scale.
- If we fail to meet our obligations under license agreements, we may lose our rights to key technologies on which our business depends.
- The ongoing COVID-19 global pandemic and the worldwide attempts to contain it could harm our business and our results of operations and financial condition could be adversely impacted by such pandemic.

Risks Related to Our Industry

- We face significant competition in an environment of rapid technological change and the possibility that our competitors may achieve regulatory approval before us or develop therapies that are more advanced or effective than ours, which may harm our business and financial condition, and our ability to successfully market or commercialize our product candidates.
- The regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed.

- If we encounter difficulties enrolling patients in clinical trials, our clinical development activities could be delayed or otherwise adversely affected.
- Even if we obtain FDA approval for any of our product candidates in the United States, we may never obtain approval for or commercialize it in any other jurisdiction, which would limit our ability to realize its full market potential.

- Even if a product candidate receives regulatory approval, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense, and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our product candidates.
- Our product candidates may cause serious adverse events or undesirable side effects or have other properties which may delay or prevent their regulatory approval, limit the commercial profile of an approved label, or, result in significant negative consequences following marketing approval, if any.
- We face potential product liability, and, if successful claims are brought against us, we may incur substantial liability and costs. If the use or misuse of our product candidates harm patients or is perceived to harm patients even when such harm is unrelated to our product candidates, our regulatory approvals could be revoked or could otherwise be negatively impacted, and we could be subject to costly and damaging product liability claims.
- Our insurance policies are expensive and protect us only from some business risks, which leaves us exposed to significant uninsured liabilities.
- The price and sale of any product candidates that be marketed may be limited by health insurance coverage and government regulation.
- Enacted and future healthcare legislation, including the ACA, may increase the difficulty and cost for to obtain marketing approval of and commercialize our product candidates and may affect the prices we may set.

Risks Related to our Dependence on Third Parties

- We may become dependent on future collaborations to develop and commercialize our product candidates and to provide the regulatory compliance, sales, marketing, and distribution capabilities required for the success of our business.
- We have no marketing, sales, or distribution resources for the commercialization of any products or technologies that we might successfully develop.
- We do not have the ability to independently conduct clinical trials required to obtain regulatory approvals for our product candidates and intend to rely on third parties to conduct, supervise and monitor our clinical trials.

Risks Related to Intellectual Property

- If we are unable to obtain and enforce patents and to protect our trade secrets, others could use our technology to compete with us, which could limit opportunities for us to generate revenues by licensing our technology and selling our products.
- There is no certainty that our pending or future patent applications will result in the issuance of patents.
- The process of applying for and obtaining patents can be expensive and slow.
- Our patents may not protect our technologies or products from competition.
- We may not be able to enforce our intellectual property rights throughout the world.
- We may be subject to patent infringement claims that could be costly to defend, which may limit our ability to use disputed technologies, and which could prevent us from pursuing research and development or commercialization of some of our technologies or products, require us to pay licensing fees to have freedom to operate and/or result in monetary damages or other liability for us.

Risks Related to Our Relationship with Juvenescence

- Our Chief Operating Officer is not a fulltime AgeX employee.
- Conflicts of interest may arise from our relationship with Juvenescence, which owns a significant percentage of our common stock and is a significant creditor and will be able to substantially influence us and exert control over matters subject to stockholder approval and the election of directors.
- Juvenescence could own a majority of the outstanding shares of AgeX common stock through the conversion of loans made to us or the exercise of Warrants.

Risks Pertaining to Our Common Stock

- There is a limited history to the public trading of our common stock and there is no assurance that a market for our common stock will be sustained.
- Because we are engaged in the development of pharmaceutical and cell therapy products, the price of shares of our common stock may rise and fall rapidly.
- Because we do not pay dividends, our stock may not be a suitable investment for anyone who needs to earn dividend income.
- Securities analysts may not initiate coverage or continue to cover our common stock, and this may have a negative impact on the market price of our shares.

- You may experience dilution of your ownership interests if we issue additional shares of common stock or preferred stock.
- Unless our common stock continues to be listed on a national securities exchange it will become subject to the so-called “penny stock” rules that impose restrictive sales practice requirements.

Special Note Regarding Forward-Looking Statements

Certain statements contained herein are forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, including, but not limited to, statements pertaining to future financial and/or operating results, future growth in research, technology, clinical development, and potential opportunities for AgeX, along with other statements about the future expectations, beliefs, goals, plans, or prospects expressed by management constitute forward-looking statements. Any statements that are not historical fact (including, but not limited to statements that contain words such as “will,” “believes,” “plans,” “anticipates,” “expects,” “estimates”) should also be considered to be forward-looking statements. Forward-looking statements involve risks and uncertainties, including, without limitation, risks inherent in the development and/or commercialization of potential products, uncertainty in the results of clinical trials or regulatory approvals, need and ability to obtain future capital, and maintenance of intellectual property rights. Actual results may differ materially from the results anticipated in these forward-looking statements and as such should be evaluated together with the many uncertainties that affect the businesses of AgeX, particularly those mentioned in the cautionary statements found in AgeX’s filings with the Securities and Exchange Commission. AgeX disclaims any intent or obligation to update these forward-looking statements.

The forward-looking statements in this Report include, among other things, statements about:

- our plans to pursue research and development of our product candidates and to license our technologies;
- the potential success of our research and development programs;
- the potential commercialization of our product candidates and technologies;
- the timing and success of future clinical trials and the period during which the results of the clinical trials will become available;
- the potential receipt of revenue from future sales of our product candidates or licensing of our technologies;
- our estimates and assumptions around market size for our product candidates and technologies;
- our estimates regarding future revenues and operating expenses, and future capital requirements;
- our intellectual property position;
- the impact of government laws and regulations;
- the impact of the Covid-19 pandemic on our operations and demand for our diagnostic tests; and
- our competitive position.

Industry and Market Data

This Annual Report (“Report”) on Form 10-K contains market data and industry forecasts that were obtained from industry publications, third-party market research and publicly available information. These publications generally state that the information contained therein has been obtained from sources believed to be reliable. While we believe that the information from these publications is reliable, we have not independently verified such information.

This Report also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. We obtained the industry and market data in this Report from our own research as well as from industry and general publications, surveys and studies conducted by third parties, some of which may not be publicly available. Such data involves a number of assumptions and limitations and contains projections and estimates of the future performance of the industries in which we operate that are subject to a high degree of uncertainty. We caution you not to give undue weight to such projections, assumptions and estimates.

Disposition and Deconsolidation of LifeMap Sciences, Inc. Effective March 15, 2021

On March 6, 2021, AgeX and its majority-owned subsidiary LifeMap Sciences, Inc. (“LifeMap Sciences”) entered into an Agreement and Plan of Merger (the “Merger Agreement”) with Atlas Capital Partners Limited, a British Virgin Islands company limited by shares (“Atlas”), and GCLMS Acquisition Corporation (“GCLMS”), a Delaware corporation that was a wholly-owned subsidiary of Atlas. On March 15, 2021, the merger was completed pursuant to the terms of the Merger Agreement. As a result of the merger, GCLMS merged into LifeMap Sciences and (a) the shares of LifeMap Sciences common stock outstanding at the time of the merger entitled the holders of those shares to receive a pro rata portion of a \$500,000 cash payment for all shares of LifeMap Sciences common stock in the aggregate (the “Merger Consideration”), with each LifeMap Sciences shareholder’s pro rata portion of the Merger Consideration to be determined in accordance with the number of shares of LifeMap Sciences common stock owned by such shareholder as a percentage of shares of LifeMap Sciences common stock outstanding immediately before the effective date of the merger, and (b) the outstanding shares of GCLMS common stock were converted into shares of LifeMap Sciences common stock so that Atlas is now the sole shareholder of LifeMap Sciences.

AgeX received approximately \$466,400 in cash as its pro rata share of the Merger Consideration in the merger. Prior to and as a condition to the merger under the terms of the Merger Agreement, \$1,761,296 of LifeMap Sciences’ indebtedness to AgeX was converted into shares of LifeMap Sciences common stock. LifeMap Sciences also paid AgeX \$250,000 in cash to pay off a portion of LifeMap Sciences’ indebtedness to AgeX that was not converted into shares of LifeMap Sciences common stock.

The results of operations and cash flows for LifeMap Sciences are reported as discontinued operations for all periods presented in our consolidated financial statements.

As a result of the completion of the cash-out merger on March 15, 2021, LifeMap Sciences is no longer a subsidiary of AgeX. Effective March 15, 2021, AgeX deconsolidated LifeMap Sciences’ consolidated financial statements and consolidated results of operations from those of AgeX under applicable accounting principles generally accepted in the United States of America due to the disposition of LifeMap Sciences on that date.

The sale of LifeMap Sciences was a taxable transaction to AgeX; however, no income tax is due as the transaction resulted in a taxable loss primarily due to AgeX’s tax basis in the subsidiary.

AgeX’s consolidated balance sheet at December 31, 2020, as reported, includes LifeMap Sciences’ consolidated assets and liabilities, after intercompany eliminations. However, LifeMap Sciences’ consolidated assets and liabilities are not included in AgeX’s consolidated balance sheet at December 31, 2021, due to the deconsolidation of LifeMap Sciences on March 15, 2021.

AgeX’s consolidated statements of operations for the year ended December 31, 2021 include LifeMap Sciences’ consolidated results for the period through March 15, 2021 rather than the day immediately preceding the deconsolidation due to the conversion of \$1,761,296 of LifeMap Sciences’ indebtedness to AgeX into shares of LifeMap Sciences common stock on March 15, 2021, followed by the completion of the cash-out merger on the same day. For the year ended December 31, 2020, AgeX’s consolidated results include LifeMap Sciences’ consolidated results for the full period presented.

The deconsolidation of LifeMap Sciences is also referred to as the “LifeMap Deconsolidation” in this Report.

For further discussion, see Notes to the Consolidated Financial Statements and *Management’s Discussion and Analysis of Financial Condition and Results of Operations* included elsewhere in this report.

PART I

References to “AgeX,” “our” or “us” mean AgeX Therapeutics, Inc.

The description or discussion, in this Form 10-K, of any contract or agreement is a summary only and is qualified in all respects by reference to the full text of the applicable contract or agreement.

Item 1. Business

Overview of Business

We are a biotechnology company focused on the development and commercialization of novel therapeutics targeting human aging and degenerative diseases. Our mission is to apply our comprehensive experience in fundamental biological processes of human aging to a broad range of age-associated medical conditions. We believe that demand for therapeutics addressing such conditions is on the rise, commensurate with the demographic shift of aging in the United States and many other industrialized countries.

Our proprietary technology, based on telomerase-mediated cellular immortality and regenerative biology, allows us to utilize telomerase-expressing regenerative pluripotent stem cell (“PSCs”) for the manufacture of cell-based therapies to regenerate tissues afflicted with age-related chronic degenerative disease. We own or have licenses to a number of patents and patent applications used in the generation of these product candidates, including intellectual property related to PSC-derived clonal embryonic progenitor cell lines (PureStem[®] technology) and HyStem[®] delivery matrices. Our technology platform also includes UniverCyte[™] which uses the HLA-G gene to potentially confer low immune observability to cells, so as to suppress rejection of transplanted cells and tissues. AgeX plans to use or license the use of this patented technology to produce genetically-modified master cell banks of pluripotent stem cells that can then be differentiated into any young cell type of the human body that now express the immune tolerogenic molecule.

Our product candidates in the discovery stage include two cell-based therapies derived from telomerase-positive PSCs and two product candidates derived from our proprietary induced Tissue Regeneration (iTR[™]) technology. We are also sponsoring a research program to derive neural stem cells from PSCs to treat degenerative diseases such as Huntington’s Disease. We will need to conduct or sponsor research and development work, or license our technology to other biotechnology or pharma companies interested in furthering research and development, as part of our plan to develop these cell- and drug-based therapies, each targeting large unmet needs in age-related medicine.

Development of Our Business

AgeX was incorporated during 2017 as a subsidiary of Lineage Cell Therapeutics, Inc. (“Lineage”), formerly known as BioTime, Inc. On August 17, 2017, we entered into an Asset Contribution and Separation Agreement (the “Asset Contribution Agreement”) with Lineage pursuant to which Lineage contributed certain assets and cash to us in exchange for 28,800,000 shares of our common stock.

The assets contributed to us by Lineage included laboratory equipment, patents, patent applications, and certain human pluripotent cell lines and human embryonic progenitor cell lines and shares of LifeMap Sciences, Inc. common stock representing a controlling interest in that company. Concurrently with the contribution of assets to us by Lineage under the Asset Contribution Agreement, we entered into a License Agreement with Lineage pursuant to which Lineage has licensed to us, with rights to sublicense, certain intellectual property, including patents and patent applications and know-how for use in the development, manufacture and commercialization of products or services for the prevention, treatment, amelioration, diagnosis or monitoring of all human and non-human animal diseases and conditions except for the field of medical products, devices and services for the reserved Lineage fields of orthopedic, ophthalmic, and medical aesthetic uses (the “Lineage Exclusive Field”). In addition, Lineage retains an option right, on terms to be negotiated, to license iTR patents in research, development, manufacturing and commercialization of treatments based on iTR in the Lineage Exclusive Field. The licensed patents and know-how relate generally to (a) PureStem[®] human embryonic progenitor cell lines, and (b) methods of manufacturing and quality control analysis of cell based therapies derived from pluripotent stem cells. We also received an option to license certain Lineage retained rights outside of orthopedic indications unless a license grant would compete with a Lineage program or products in the Lineage Exclusive Field.

Lineage and certain Lineage subsidiaries also entered into agreements pursuant to which they have licensed or sublicensed to us, on a non-exclusive, world-wide, royalty bearing basis, certain additional patents and patent rights and know-how relating to HyStem[®] hydrogel technology, human embryonic progenitor cell technology, and human pluripotent stem cell lines and technology for use outside the Lineage Exclusive Fields, or in the case of certain sublicense rights, fields previously licensed to third parties.

The human embryonic progenitor cell lines, human pluripotent stem cell lines, and patents contributed or licensed or sublicensed to us by Lineage and its subsidiaries include our initial product candidates AGEX-BAT1 brown adipocytes and AGEX-VASC1 young vascular cells, and our foundation technologies PureStem[®], HyStem[®] and induced tissue regeneration or iTR[™] technology.

Concurrently with the acquisition of assets from Lineage, we sold 4,950,000 shares of common stock for \$10.0 million in cash primarily to investors other than Lineage. At the close of the financing, Lineage owned 85.4% of our issued and outstanding shares of common stock. On June 7, 2018, we sold 2.0 million shares of common stock for \$2.50 per share to Juvenescence Limited (“Juvenescence”) for aggregate cash proceeds to us of \$5.0 million. That financing along with the 2017 sales of shares of common stock and subsequent sales of common stock purchase warrants to other private investors allowed us to focus our initial resources on our pre-clinical research and development programs.

On August 30, 2018, Lineage sold 14.4 million of its shares of AgeX common stock to Juvenescence. Upon completion of the transaction, Lineage’s ownership in AgeX was reduced from 80.4% to 40.2% of our issued and outstanding shares of common stock, and Juvenescence’s ownership in AgeX was increased from 5.6% to 45.8% of our issued and outstanding shares of common stock. As a result, beginning on August 30, 2018, we were no longer considered a subsidiary of Lineage for financial reporting purposes, because on that date, Lineage experienced a “loss of control” of a subsidiary, as defined by accounting principles generally accepted in the United States of America (“US GAAP”).

On November 28, 2018 (the “Distribution Date”) Lineage distributed to its shareholders, on a pro rata basis, 12,697,028 shares of the AgeX common stock it then held (the “Distribution”). Immediately after the Distribution, Lineage retained 1,718,972 shares of AgeX common stock, representing approximately 4.8% of the common stock then issued and outstanding. Following the Distribution, our common stock began publicly trading on the NYSE American under the symbol “AGE”.

During August 2018, we expanded our technology platforms by acquiring from Escape Therapeutics, Inc. patents and patent applications related to HLA-G-modified cells and methods of generating allogeneic cells with reduced risk of being rejected by patients regardless of the HLA class I haplotype. These patents are the foundation for our UniverCyte™ technology platform.

During March 2021, AgeX disposed of its interest in LifeMap Sciences pursuant to the terms of the Merger Agreement.

Additional Information

AgeX is incorporated in the State of Delaware. Our common shares trade on the NYSE American under the symbol “AGE.” Our principal executive offices are located at 1101 Marina Village Parkway, Suite 201, Alameda, CA 94501, and our phone number at that address is (510) 671-8370. Our website address is www.ageinc.com. The information on, or that can be accessed through our website is not part of this Report. We make available, free of charge through our website, our most recent annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports, as soon as reasonably practicable after the reports are electronically filed with or furnished to the Securities and Exchange Commission (the “SEC”).

iTR™, UniverCyte™, Renelon™, and EPRO™ are trademarks of AgeX Therapeutics, Inc. HyStem® and PureStem® are registered trademarks of Lineage Cell Therapeutics, Inc.

Emerging Growth Company

We are an “emerging growth company” under the Jumpstart our Business Startups Act of 2012 or the JOBS Act. As an emerging growth company, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable, in general, to public companies that are not emerging growth companies. These provisions include:

- reduced disclosure about our executive compensation arrangements;
- no non-binding stockholder advisory votes on executive compensation or golden parachute arrangements; and
- exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting.

We will remain an “emerging growth company” until the earliest of: (i) the last day of the fiscal year in which we have total annual gross revenues of \$1.07 billion or more; (ii) the last day of our fiscal year following the fifth anniversary of the date of the first sale of our common equity securities pursuant to an effective registration statement under the Securities Act of 1933, as amended (the “Securities Act”); (iii) the date on which we have issued more than \$1.0 billion in nonconvertible debt securities during the previous three years; or (iv) the date on which we are deemed to be a “large accelerated filer” under the Securities Exchange Act of 1934, as amended (the “Exchange Act”).

The JOBS Act permits an emerging growth company to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. However, we have elected to comply with newly adopted or revised accounting standards when they become applicable to public companies because our financial statements were previously consolidated with those of our former parent company Lineage Cell Therapeutics, Inc. which is not an emerging growth company under the JOBS Act and is therefore not permitted to delay the adoption of new or revised accounting standards that become applicable to public companies. This election under the JOBS Act to not delay the adoption of new or revised accounting standards is irrevocable.

Overview of Our Opportunity in Age-Related Diseases

To date, conventional pharmaceutical approaches to the chronic degenerative conditions associated with aging have provided limited benefit. Often the approaches offer merely relief from the symptoms of ageing and age-related disease, rather than targeting underlying disease processes. We believe this is about to change through harnessing the power of new cellular and molecular technologies. We aim to lead this coming revolution with our pioneering technologies to restore tissue and organ function. Our cell therapy approach is focused on generating and delivering new cells to patients. Our iTR approach is focused on reversing the age of cells already in the body, where our research team in February 2020 published that they had converted the cells of a 114-year-old to young pluripotent stem cells in the lab [J. Lee et al., Induced pluripotency and spontaneous reversal of cellular aging in supercentenarian donor cells, *Biochemical and Biophysical Research Communication*, <https://doi.org/10.1016/j.bbrc.2020.02.092>].

Aging is one of the most significant demographic trends of our time. As shown in Figure 1, the U.S. Census Bureau projects a sharp rise in the number of Americans over 80 years of age, with an acceleration occurring between the years 2020 and 2030.

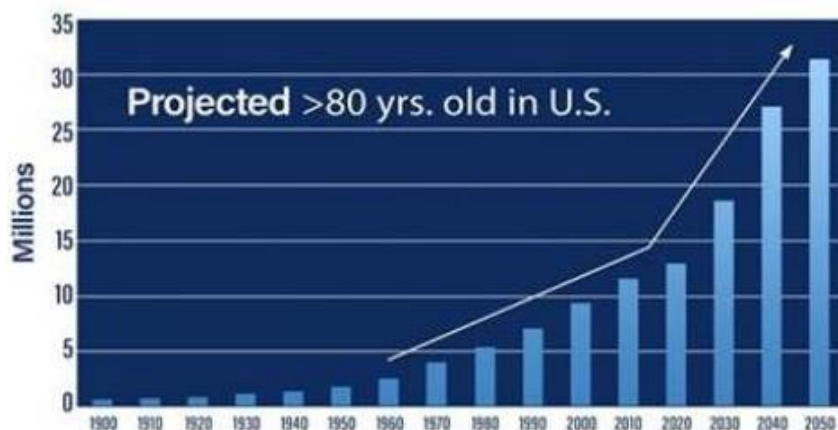


Figure 1. Projected increase in the numbers of the U.S. population over 80 years of age (U.S. Census Bureau)

This demographic shift associated with 76 million aging baby boomers poses a significant challenge to our healthcare system and our economy as a whole. The unsolved problem relates to the fact that chronic conditions account for about 80% of total health care expenditures in the United States, with the elderly having a higher prevalence of chronic degenerative disease than the young. Approximately 80% of older adults have one chronic disease, and 68% have two or more.

Our technology platforms reflect over 25 years of research and development in cell immortality and regenerative medicine. It is designed to address some of the largest unmet needs of an aging population by translating state-of-the-art laboratory science relating to aging into meaningful therapeutic biologicals and drugs.

Overview of Our Product Candidates

Our product pipeline includes two cell-based and two iTR-based product candidates in development.

Our lead cell-based therapeutic candidates in development are AGEX-BAT1 and AGEX-VASC1:

- AGEX-BAT1 is our lead cell therapy product candidate in the discovery stage of development utilizing PSC-derived brown adipocytes for the treatment of certain age-related metabolic disorders such as Type II (adult-onset) diabetes and obesity.
- AGEX-VASC1 is a cell-based therapy in the discovery stage of development comprised of young regenerative vascular-forming cells. AGEX-VASC1 may restore vascular support in aged ischemic tissues such as in peripheral vascular disease and ischemic heart disease.

Our lead small molecule drug-based therapeutic candidate for induced Tissue Regeneration (iTRTM) in discovery is AGEX-iTR1547 and our lead biologic candidate for iTR is AGEX-iTR1550:

- AGEX-iTR1547 is a drug-based formulation and AGEX-iTR1550 (also known as RenelonTM) is a gene delivery technology, both of which are in the discovery stage of development. Initial indications for use may include scarless wound repair.

Our research related to the reprogramming of aging has also led to novel insights into cancer. We have filed patent applications on inventions that relate to these discoveries. These technologies may provide novel targets for cancer therapy and diagnosis. One such cancer therapeutic in the early stages of development is designated “EPROTM” (Embryonic Promoter-Regulated Oncolysis). EPRO is an oncolytic gene therapy strategy that may provide a novel means of selectively destroying an array of different types of cancer cells. Successful development of EPRO will be dependent, in part, on the availability of financing and licensing or joint development opportunities.

Our currently marketed research products include cGMP ES Cells (human embryonic stem or “hES”) cells produced under current good manufacturing practices (or “cGMP”) and PSC-derived cells for research:

- cGMP PSC lines and PSC-derived cells for research: Through our ESI BIO division, we market cGMP PSC lines as well as PSC-derived cells.

Overview of Our Technology Platforms

The technology underlying our product development programs is based on telomerase-mediated cellular immortality and regenerative biology. By “telomerase-mediated cellular immortality” we refer to the fact that cells that express sufficient levels of a protein called telomerase are capable of replicating without limit. By “regenerative biology,” we refer to novel methods to regenerate tissues afflicted with age-related chronic degenerative disease such as peripheral vascular disease and ischemic heart disease as well as age-related metabolic disorders such as those associated with Type II diabetes and obesity, as well as others. We utilize telomerase-expressing regenerative Pluripotent Stem Cells, or PSCs, for the manufacture of cell-based therapies. We own or have licensed numerous patents and patent applications covering methods and compositions relating to this technology platform.

Our core technology platforms provide us with a strong foundation for successfully addressing many of the diseases of ageing by focusing on broad therapeutic applicability and commercially scalable technologies:

1. **PureStem[®]**: AgeX’s allogeneic cell derivation and manufacturing platform, based on human embryonic progenitors, which are cells in state of development between embryonic stem cells and adult cells. We believe PureStem has the potential to solve several major challenges faced by the cell therapy industry by generating cellular therapeutics which would:

- be commercialized as “off-the-shelf” products
- be pure and industrially scalable
- have lower cost of goods per unit
- be amenable to traditional pharma supply chain logistics
- have the potential for acceptable reimbursement prices, unlike the very expensive autologous products, and
- have higher clinical adoption from expected cost savings and more simplified processes.

In addition, we believe PureStem cells may have advantages over mesenchymal stem cells (MSCs), which may only survive transiently in the body and exert any short-term benefit by releasing paracrine factors, which may limit their potential of MSCx.

MSCs neither engraft nor become specialized cells. On the other hand, cells derived from PureStem progenitors will be young, not prone to the disadvantages associated with older cells, and are expected to become permanently engrafted in the body to deliver a true regenerative outcome. To date, AgeX has isolated more than 200 cell types from PureStem.

2. **UniverCyte[™]**: AgeX’s pioneering technology to genetically modify allogeneic donor cells to potentially become hypoimmunogenic/universal, so they can potentially be transplanted into all patients in an off-the- shelf manner, without the normal need for human leukocyte antigen (HLA) matching between donor and receipt or immunosuppression. UniverCyte utilizes a potent molecule called HLA-G. HLA is a group of related proteins that helps the immune system distinguish the body’s own proteins from proteins made by foreign invaders such as viruses and bacteria. HLA-G’s only known physiological role in nature is to prevent destruction of a semi-allogeneic fetus by the maternal immune system. UniverCyte could potentially avoid immune rejection of transplanted cells, solving a major challenge facing the allogeneic cell therapy industry. In addition to utilizing UniverCyte[™] for its own future cell therapy products, AgeX may make UniverCyte[™] available to other cell therapy companies through licensing arrangements.

3. **HyStem[®]**: Delivery technology to stably engraft cells or slowly release small molecules in the body for greater safety and efficacy. The key advantages of HyStem[®] over competitors may include: (1) higher cell retention, survival, proliferation and engraftment; (2) biodegradability which can be fine-tuned; (3) non-immunogenicity; (4) immunosuppressive in nature; (5) ease of usage; and (6) scalability.

4. **Induced Tissue Regeneration (iTR[™])**: The aim of iTR is to return aged cells back to a youthful state, thereby inducing a capacity for scarless regeneration characteristic of early developing tissues, without reverting cells to pluripotency. This technology is sometimes referred to as “partial reprogramming” or “epigenetic reprogramming of aging”. This novel approach may trigger complete regeneration of cells, and potentially even complex tissues, damaged as a result of age-related degenerative processes or trauma. The premise behind iTR is that aging, and in turn degenerative diseases of old age, are a result of the loss of two characteristics of cells; namely, replicative immortality and regenerative capacity. These two characteristics are present in embryonic cells but are lost at the embryonic to fetal transition (EFT). With this loss, humans can no longer generate new cells or repair damaged cells scarlessly and in sufficient numbers to maintain health. We discovered that cells begin expressing the gene COX7A1 at the EFT when regeneration is commonly lost. Therefore, the gene may be a key inhibitor of cellular regeneration. For example, we have discovered that restoring a regenerative pattern of COX7A1 gene expression may facilitate hair regeneration in mouse models. In addition, we have invented multiple platforms for delivering iTR using small molecules as well as biologic strategies such as those using gene therapy to transiently express reprogramming factors. We have filed patent applications on the use of iTR in a wide array of degenerative conditions including cancer.

5. **ESI cell lines:** AgeX has six clinical-grade human embryonic stem cell lines, they are distinguished as the first clinical-grade human pluripotent stem cell lines created under current Good Manufacturing Practice as described in Cell Stem Cell (2007;1:490-4). They are listed on the National Institutes of Health (NIH) Stem Cell Registry in the USA and are among the best characterized and documented stem cell lines in the world. ESI-053 is 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. The FDA cleared an IND application from ImStem Biotechnology, one of our sublicensees, for a MSC product derived from ESI-053 for multiple sclerosis. This was believed to be the first MSC product derived from a pluripotent stem line to be accepted for a human trial by the FDA. The ESI cell lines are available as research or clinical grade product, and have been offered since 2006.

Business Strategy

Each of our four proprietary platform technologies, PureStem[®] for cell derivation and manufacturing, UniverCyte[™] for generation of hypoimmunogenic cells, iTR[™] for reversing the age of cells already in the body and HyStem[®] for cell or small molecule-based iTR[™] delivery, presents AgeX with a multiplicity of attractive opportunities which we may pursue. Given these platform technologies may be highly desirable to multiple academic and biopharma companies due to their broad applicability and potentially important clinical and commercial benefits, AgeX plans to pursue different business models for these platforms:

- **Co-Development and Licensing:** Our PureStem[®] and UniverCyte[™] technologies as well as our ESI cell lines may have applications in the development of a broad range of cell therapy products. We will seek opportunities to license these AgeX technologies to other cell therapy or biopharma companies to bring in early revenue streams, especially for therapies that AgeX does not presently intend to develop.
- **Cellular Therapy:** AgeX presently does not have the laboratory and research staff required to conduct in-house research and development for its product candidates, including AGEX-BAT1 and AGEX-VASC1. Instead, AgeX may conduct research and development of those product candidates through a variety of alternative strategies, including but not limited to sponsoring research and development work at research laboratories at universities or other educational institutions, entering into co-development and marketing arrangements with researchers or other companies in the cell therapy or biopharma industry, and engaging contract service providers to conduct research and development and manufacturing for AgeX for particular product candidates.
- **Reverse Bioengineering, Inc.:** Partial cellular reprogramming using our iTR[™] technology may one day allow us to revert aged or diseased cells inside the body back to a more youthful, healthy and functional state. We incorporated Reverse Bioengineering, Inc. (“Reverse Bio”) as an AgeX subsidiary to develop our revolutionary iTR[™] platform. Reverse Bio will allow for a dedicated focus on iTR[™] in terms of equity financing and advancing our iTR[™] technology to proof-of-concept in an animal model. We have assigned to Reverse Bio our patent portfolio for iTR development, but the future operations of Reverse Bio will depend in large measure on its ability to raise its own capital.

Each of these models may provide particular benefits to AgeX in terms of financing and efficiency of operations. However, each alternative has potential disadvantages as well. If AgeX out-licenses its technology it will avoid the costs and risks of research and development, clinical trials, regulatory approval, manufacturing, and commercialization of product candidates, but the revenues AgeX would receive from commercialization of products developed under those arrangements would likely be limited to royalties on product sales and potentially licensing fees and milestone payments representing a relatively small portion of total product revenues. Similarly, co-development and marketing or similar arrangements would permit AgeX to share costs and risks but would also require AgeX to share revenues from the product candidates that may be successfully developed and commercialized. See “Risk Factors” elsewhere in this Report for information about certain risks associated with reliance on arrangements with third parties for research, product development, clinical trials, manufacturing, and commercializing product candidates.

We plan to finance our iTR[™] research and development through Reverse Bio. To the extent that such financing is obtained through the sale of capital stock or other equity securities to investors or other biopharma companies by Reverse Bio, or the sale of Reverse Bio shares held by AgeX, our equity interest in Reverse Bio and its iTR[™] business would be diluted.

Background of Human Aging

Cell Immortality

There is a growing consensus in the scientific community that human aging is due in large part to the aging of individual cells in the various tissues of the body (somatic cells). In contrast, the reproductive lineage of cells (germ-line) perpetuate the human species from generation-to-generation without limit and continue to generate new people over the millennia.

In 1961, Dr. Leonard Hayflick first reported that normal human cells in the body (unlike the germ-line) can proliferate for only a finite number of times (typically fewer than 100 times). This phenomenon, known as the “Hayflick Limit”, “cell mortality”, or “cellular aging”, is a normal property of somatic cells. In the 1990s, our CEO, Dr. Michael D. West, founded a biotechnology company called Geron Corporation, where his team isolated for the first time the human gene called “Telomerase Reverse Transcriptase” or “telomerase.” In 1998, Geron scientists in collaboration with scientists at the University of Texas Southwestern Medical Center at Dallas, published the result that telomerase could stop the aging of human cells, or could “immortalize” them.

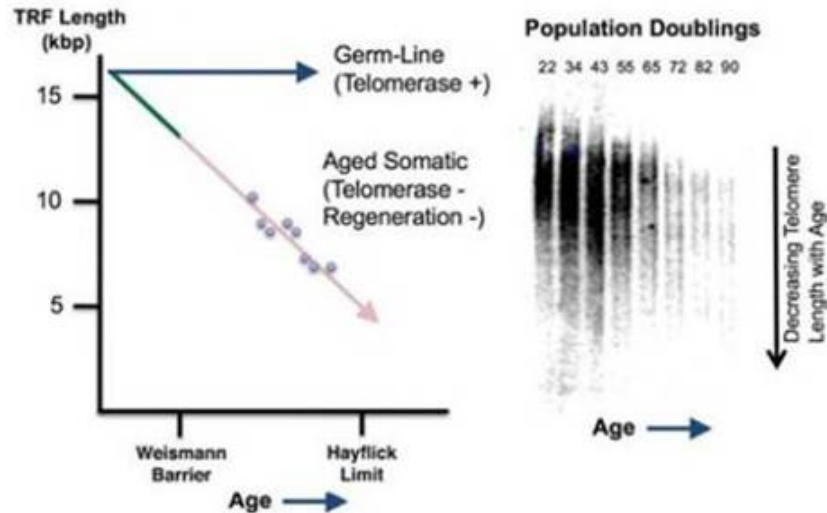


Figure 2. The Germ-line/soma dichotomy wherein germ-line cells express telomerase, maintain telomere length, and exhibit replicative immortality, while body (somatic) cells lack telomerase, showing progressive telomere shortening until they reach the Hayflick limit.

In 1994, Dr. West’s group demonstrated through an assay for measuring telomerase activity that nearly 90% of cancer cell types cultured in the laboratory or tumors surgically removed from patients abnormally express telomerase. This broke the then dogma that there was no common mechanism at work in cancer. Scientists have concluded that cell mortality, while being detrimental in old age, benefits us early in life by helping to repress cancer cell growth. Figure 2 illustrates this dichotomy wherein immortal cells such as the germ-line cells that perpetuate the species are immortal through telomerase activity while body (somatic) cells lack telomerase expression, and as a result show progressive telomere shortening and a finite lifespan (are mortal).

The Weismann Barrier

Early in the evolution of life, primitive unicellular and even multicellular organisms may have lacked programmed aging as a result of the potential of their cells having the potential for both replicative immortality and regeneration. However, in more complex animals such as mammals, somatic cells lose not only replicative immortality, but after most organ systems are formed during embryonic development, they also lose full regenerative potential. This repression of both telomerase-mediated cell immortality and regeneration potential is called the “Weismann Barrier” (see Figure 3).

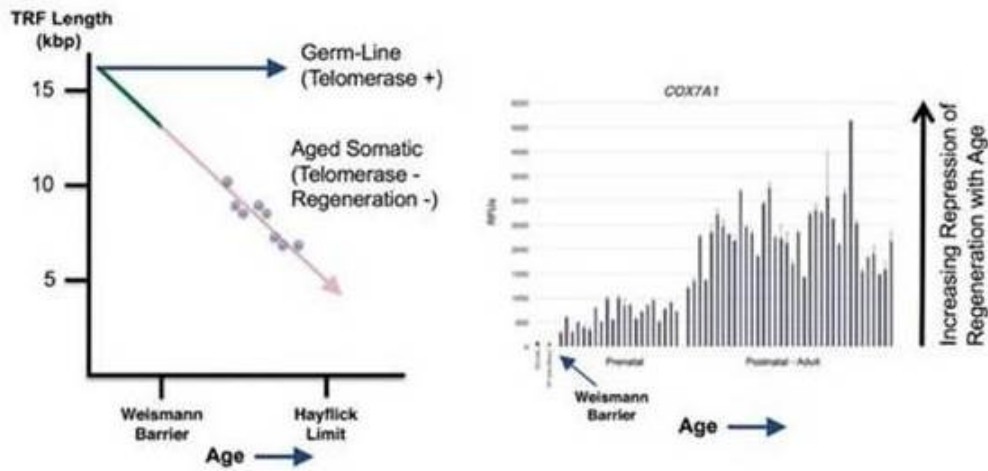


Figure 3. The Weismann Barrier coincides with the loss of both replicative immortality and regeneration. Levels of expression of the gene *COX7A1* provide a useful marker of the loss of regenerative potential.

PSCs represent the earliest stages of human development and are the first normal human cells cultured in the laboratory that display both telomerase-mediated replicative immortality and regenerative potential. Therefore, our scientists utilized these cells as well as the primitive regenerative cells derived from them, called “PureStem[®]” cell lines, in research where they were compared to diverse adult cells on the mortal side of the Weismann barrier to uncover the mechanisms regulating the loss of regenerative potential. Artificial intelligence algorithms were used to parse millions of gene expression data points and the results were published in late 2017. Figure 3 shows the Weismann Barrier and the associated rise of a gene expression marker of the non-regenerative state designated *COX7A1*. This proprietary marker, along with other insights obtained from the research, provides us with a window into this biology and a means of screening for agents capable of restoring a regenerative state to old nonregenerative cells. It is anticipated that such agents may not only reset the pattern of gene expression in adult cells back to that their regenerative counterparts but may also induce tissue regeneration when applied *in vivo* in the context of age-related degenerative disease. Since the previously mentioned 2017 publication described the re-emergence of the regenerative phenotype in the majority of cancer cell lines, the discoveries may open the door to potentially important diagnostic and therapeutic implications as well.

Pluripotent Stem Cells (PSCs)

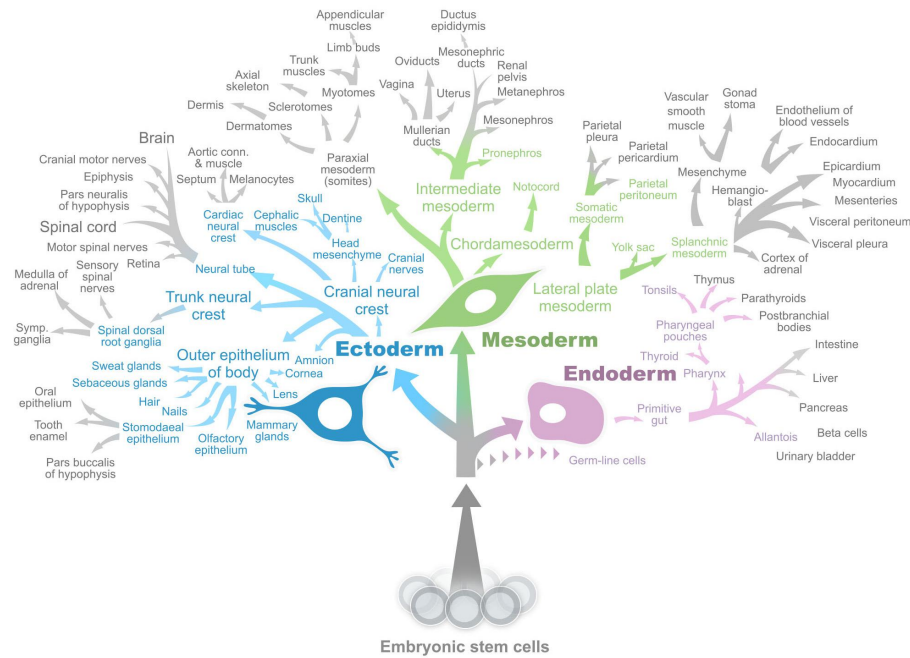


Figure 4. Pluripotent Stem Cells (PSCs) possess both telomerase-mediated replicative immortality and regenerative potential, capable of producing all human cell types.

In an effort to utilize telomerase-mediated immortality and regenerative biology in the development of novel therapeutics, in the mid-1990s, Dr. West, organized a collaboration with Drs. James Thomson, John Gearhart, and Roger Pedersen that led to the first isolation of PSCs. In contrast to other types of cells, PSCs are unique by at least two important criteria. The first criterion relates to the ability of pluripotent cells to proliferate, or make more copies of themselves, indefinitely, that is to say, they are “immortal”. The second relates to the ability of PSCs to differentiate into any of the hundreds of specialized cell types in the body. This replicative immortality of PSCs facilitates the industrial scalability of product. We believe that many of these cell types have potential for regenerating function in tissues damaged by degenerative diseases when transplanted. A small sampling of these cell types is shown in Figure 4. Unlike PSCs, adult stem cells typically have severely-reduced scale-up potential (are mortal unlike immortal PSCs), and have passed the Weismann Barrier, and are therefore limited in their ability to regenerate normal tissue when transplanted *in vivo*. Therefore, we believe that PSC-based cellular therapeutics have significant competitive advantages over cell-based therapeutics being developed by many adult stem cell companies.

Our Technology Platforms

PureStem[®] Technology

Regulatory approval of cell- and tissue-based products require high standards of quality control. In the case of stem cell-derived products, there is a high standard for ensuring the known identity, purity, and reproducibility of the cells to be administered. PSCs provide certain advantages over adult stem cell products when used in the manufacture of cell-based therapeutics for the treatment of age-related disease. These advantages include:

- The replicative immortality of the PSCs which facilitates the indefinite scale-up of PSC master cell banks for the manufacture of uniform product, as well as an immortal substrate for targeted genetic modifications.
- Since most PSCs maintain long and stable telomere lengths, the replicative capacity of derived differentiated cell types is typically longer (younger) than adult or even fetal-derived cells.
- Using PureStem[®] technology, it is possible to clonally expand hundreds of purified, identified, and reproducibly scalable cell types that retain regenerative potential (have not passed the regeneration limit).

PureStem[®] technology is based on the observation that embryonic anlagen of many tissues in the human body are naturally comprised of highly proliferative cells with relatively long telomere length. Therefore, it is possible to generate clonal lineages of these cells *in vitro*. Cells derived from adult tissues commonly permanently cease to divide after a certain number of doublings, a condition known as senescence. In addition, adult and even fetal tissues largely contain differentiated cells often with limited or no capacity of replication *in vitro*. As a result, the clonal expansion of human embryonic progenitor cell types allows not only a novel and more facile point of scalability but also generates populations of cells that are multipotent instead of pluripotent, and therefore markedly easier to define identity, purity, and potency.

We have studied the fate of over 200 diverse PureStem cell lines in thousands of differentiation conditions. This was accomplished by thawing individual cryopreserved PureStem cell lines, culturing them in the laboratory, and then exposing the cells to factors that differentiate cells such as protein growth and differentiation factors, hormones, and small molecules implicated in causing cells to change from one type of cell into another (differentiation). Using individual cells from the over 200 diverse PureStem cell lines previously isolated and cryopreserved, we treated the diverse cells with thousands of differentiation conditions, prepared RNA, and determined the gene expression pattern of the cells using gene expression microarrays. These experiments have shown that the PureStem cell lines display site-specific markers that identify not only the type of cells, but also where in the body the cells would normally reside. Therefore, in the example of cartilage cells, it was possible to produce diverse types of cartilage in this manner. We have licensed from our former parent company Lineage Cell Therapeutics, Inc. (“Lineage”) PureStem applications outside of orthopedics, medical aesthetics, and certain ophthalmological applications.

We have chosen two PureStem applications for our initial product development based on unmet medical need along with other factors. The first product candidates are AGEX-BAT1, brown adipose tissue or BAT cells for the treatment of metabolic disorders such as obesity or Type II diabetes, and AGEX-VASC1, vascular endothelial progenitors for the treatment of age-related ischemic disease such as that leading to peripheral vascular disease and ischemic heart disease. These cells will be formulated in a delivery matrix designated HyStem[®] to promote viability of the graft as well as to localize the cells to the intended site in the body.

HyStem[®] is a patented biomaterial that mimics the extracellular matrix that is the structural network of macromolecules surrounding cells in the body. The extracellular matrix is essential for normal cellular function and survival of transplanted cells. Many tissue engineering and regenerative cell-based therapies are expected to benefit from the delivery of therapeutic cells in a matrix for precise localized delivery and survival. HyStem is a unique hydrogel that has been shown to support cellular attachment *in vivo*. Current research at medical institutions has shown that HyStem is compatible with a wide variety of cells and tissue types including those of the brain, bone, skin, cartilage, vascular system and heart. The technology underlying HyStem hydrogels was developed at the University of Utah and has been exclusively licensed to Lineage for human therapeutic applications and sublicensed to AgeX for certain fields. The HyStem technology is based on a unique thiol cross-linking chemistry to prepare hyaluronan-based matrices as hydrogels. Since the first published report in 2002, there have been numerous academic scientific publications supporting the biocompatibility of thiol cross-linked hyaluronan-based matrices and their applications as medical devices and in cell culture, tissue engineering, and animal models of cell-based therapies.



Figure 5. AgeX plans to utilize the HyStem[®] technology for the delivery of cell-based therapeutics.

Due to the unique cross-linking chemistry, HyStem matrices have the ability to be safely combined with living cells and subsequently injected or applied locally as a hydrogel which allows the gel to conform to the three-dimensional contour of a tissue. Building upon this platform, we initially plan to use HyStem for cell-based therapy.

The building blocks for HyStem hydrogels may vary with the application but typically include combinations of hyaluronan, gelatin, or heparin, each of which has been thiol-modified. Hydrogels are formed by cross-linking mixtures of these thiolated macromolecules with polyethylene glycol diacrylate (PEGDA). The rate of gelation and the hydrogel stiffness can be controlled by varying the amount of cross-linker. An important attribute of HyStem hydrogels is their large water content, over 98%. As a result, these hydrogels have a high permeability for oxygen, nutrients, and other water-soluble metabolites.

UniverCyte™

Our UniverCyte™ technology uses a proprietary, novel, modified form of HLA-G and is intended to permit donor cells to be transplanted into patients without donor-patient tissue matching and without administering immunosuppressant medication. Immunosuppressive drugs can reduce patient resistance to infectious diseases and cancers as well as cause organ and other toxicities. Reducing or eliminating the need for immunosuppressants after cell transplantation by use of hypoimmunogenic cells may make therapies universally available. We plan to use or license the use of this patented technology to produce genetically-modified master cell banks of pluripotent stem cells that can then be differentiated into any young cell type of the human body that now express the immune tolerogenic molecule.

Products and Product Candidates

Our Therapeutic Product Candidates

AGEX-BAT1 - Brown Adipose Tissue (BAT) Progenitors

Brown adipose tissue (BAT) is abundant early in life but lost precipitously with age. This tissue is believed to generate heat through expression of a gene called *UCP1*. In addition, the high levels of glucose and lipid uptake by the tissue is believed to balance metabolism in young people. In contrast, central obesity and Type II diabetes has been correlated with low levels of BAT.

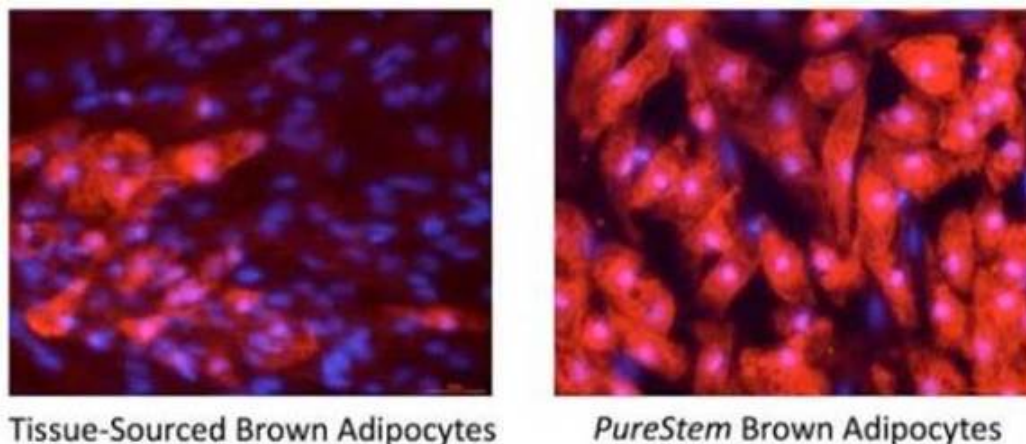


Figure 6. Human tissue-derived BAT cells (left) stained red for the presence of UCP1 show a minority of cells being true BAT cells. PureStem-derived AGEX-BAT1 cells are uniformly UCP1 positive.

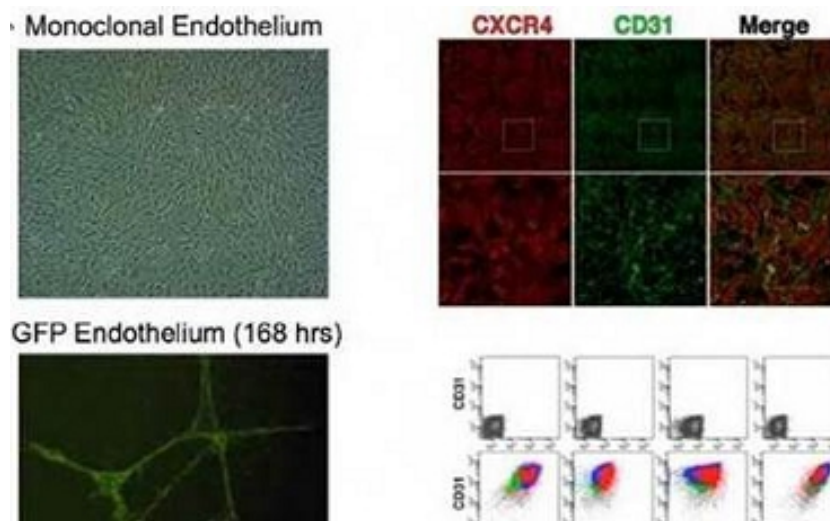
The demonstration in published literature in the public domain that the transplantation of BAT from young mice to obese diabetic mice resulted in weight loss and increased insulin sensitivity has led to a search for a source of industrially-scalable clinical grade BAT cells as well as an appropriate matrix for lipotransfer. There currently is no FDA-approved matrix for cell transplantation. However, Lineage has obtained a CE Mark for the marketing of HyStem (Renevia) for cell-assisted lipotransfer procedures in Europe. Therefore, we believe HyStem can be used for the delivery of BAT cells produced using PureStem[®] technology. As shown in Figure 6, the *AGEX-BAT1* progenitors strongly express the BAT marker UCP1 when induced to differentiate and show a relatively high degree of purity compared to human tissue-derived BAT.

We have entered into a Sponsored Research Agreement with Ohio State University using AGEX-BAT1 in mice to determine whether transplantation of AgeX-BAT1 cells may lead to improvements in diet-induced obesity, metabolic health including glucose metabolism, and cardiac function. For purposes of this proof of concept work, two different cell transplant matrices will be tested, HyStem and a 3-D silk scaffold.

AGEX-VASC1 - Vascular Progenitors

PureStem[®] technology can also yield highly purified embryonic vascular components. As shown below, select clonal lines express markers such as VE-Cadherin (CDH5) and PECAM1, as well as VWF and other markers of venous, arterial, and lymphatic endothelium. Flow cytometry shows purity indistinguishable from 100%.

In addition to vascular endothelial cells, we have characterized vascular smooth muscle cell progenitors. This makes it possible for us to construct two of the key cellular components of arterial vessels, such as those compromised in coronary artery disease.



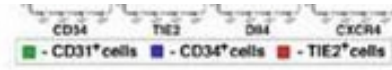


Figure 7. PureStem-derived vascular endothelial cell lines are capable of regenerating young vasculature (bottom left) and appear to have essentially 100% purity by FACS analysis.

HyStem hydrogels have been successfully used in cell transplantation research in animal models and in a CE marked product developed by Lineage for autologous adipose tissue preparations to restore and/or augment facial volume as a treatment of facial lipoatrophy after subcutaneous fat volume loss. AgeX's near term goal is to optimize process development for planned animal preclinical testing of AgeX-VASC1 formulated in HyStem for delivery into ischemic heart tissue to regenerate collateral circulation.

AGEX-iTR1547 — Induced Tissue Regeneration (iTR™)

Leveraging our assets in pluripotency and bioinformatics, we have performed research manipulating cellular immortality and regenerative biology in human cells. In 2010, our scientists while at Lineage demonstrated the reversal of the developmental aging of human cells using transcriptional reprogramming technology. In 2017, we published certain markers of the Weismann barrier, and the high prevalence of a reversion back before the Weismann barrier in diverse cancer cell types cultured *in vitro*.

We extended this research to determine whether reprogramming can be modified to only reverse the aging of cells back before the Weismann Barrier, not back to pluripotency. We have utilized for example the gene *COX7A1* as a marker of cells that have lost regenerative potential (crossed the Weismann Barrier). As shown in Figure 8, our proprietary formulation AGEX-iTR1547 has demonstrated initial capability of reducing the expression of the marker gene *COX7A1* back to before the Weismann Barrier without reverting the cells to pluripotency. When implemented *in vivo*, this partial reprogramming, or iTR, would be expected to induce tissue regeneration, and when combined with telomerase, could modulate both cellular immortality and regenerative biology for therapeutic effect. In addition to the small molecule product candidate designated iTR1547, we have invented biological interventions based, for example, on gene therapy. Our inventions relating to iTR biologics disclose both DNA and RNA-based strategies. Our gene delivery iTR product candidate is designated iTR1550. We are performing research to optimize AGEX-iTR1547 and in parallel a gene delivery formulation designated AGEX-iTR1550 in order to initiate preclinical studies of one or both of the agents on the scarless regeneration of the skin.

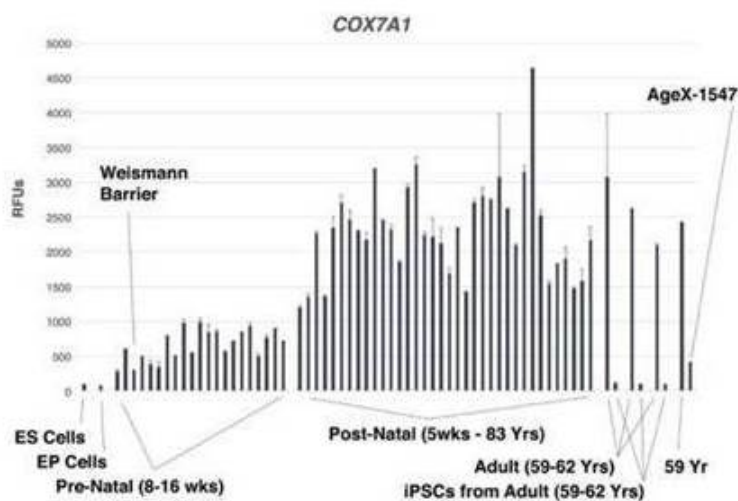


Figure 8. PSCs such as ES Cells and PureStem EP Cells display a regenerative capacity like cells that have not cross the Weismann Barrier. During pre- and post-natal development, skin cells become increasingly incapable of scarless regeneration as reflected in increasing *COX7A1* expression. iPS cell reprogramming reverts cells back to pluripotency, while AgeX-iTR1547 reverts cells back only to a point prior to the Weismann Barrier (regenerative state).

Status and Development Plan

The product candidates we have chosen are in the discovery stage of development. Prior to filing an Investigational New Drug (IND) application for the initiation of clinical trials of our initial product candidates, AGEX-BAT1, AGEX-VASC1, and AGEX-ITR1547/AGEX-iTR1550 a number of important research and development goals will need to be achieved, including discovery-level research for the qualification of reagents used in the manufacture of the product, completion of the standard operating procedures to be used (SOPs), complete the methods and documentation for characterization of the product; and producing and testing the genetic modifications in the master cell banks of the pluripotent stem cells under current Good Manufacturing Practices (cGMP) in order to produce product that will not illicit immune rejection following transplantation. In addition, we will be required to expand the numbers of the pluripotent stem cell master cell banks for future use; produce working cell banks from which the product will be manufactured for clinical trials; produce the relevant product under cGMP conditions; and expand the number of relevant cells and cryopreserve them under cGMP conditions. In addition, we will be required to design the pre-clinical studies including the study endpoints, perform biosafety testing and release the first clinical batch based on preliminary characterization results, and complete full product characterization. Biosafety testing will necessarily include pilot testing in animals such as (NOD/SCID) mice, dosing spiking studies at early and later endpoints, tumorigenicity and biodistribution studies to determine whether the cells form undesired tumors or migrate to inappropriate sites respectively in the animal. Lastly, we will need to define the clinical trial and regulatory strategy and hold Pre-Pre-IND and Pre-IND meetings with the Food and Drug Administration (FDA), as well as successfully submit an investigational new drug application or IND to the FDA and receive clearance to begin trials. Thereafter, we will need to demonstrate safety and efficacy of the product in human clinical trials in Phase I and II trials, and continued safety and efficacy for achieving the desired endpoint in Phase III trials, potentially then leading to product registration. See “Risk Factors — Risks Related to Our Business Operations” for discussion of risks relating to product development and clinical trials. These include, but are not limited to, failure to successfully complete the aforementioned studies due to the failure of the product, processes, or skills of our employees, unforeseen delays in the development process, failure to raise requisite financing, or failure to receive permission from the FDA to advance product development. To the extent we license development of one or more product candidates to third parties or enter into collaboration arrangements for product development, our licensees or collaborators

would need to undertake and achieve the foregoing goals.

Because our product candidates are still in the discovery stage, our choice of product candidates and development plans are subject to change based on a variety of factors. We may determine to abandon the development of one or more of our product candidates, or we may prioritize the development of one or more product candidates, or we may select or acquire and prioritize the development of new product candidates. Our choice and prioritization of product candidates for development will be influenced by a variety of factors, including but not limited to:

- Results of our laboratory research and any animal and clinical trials that we or any licensees or collaborators may conduct;
- Our ability to enter into licensing or collaborative arrangements with other biotechnology or biopharma companies or universities with their own laboratory facilities and research staffs to conduct research and development of one or more product candidates;
- Our analysis of third-party competitive and alternative technology that may lead us to conclude that our product candidates or technologies may be non-competitive or obsolete;
- Our analysis of market demand and market prices for the products we plan to develop could lead us to conclude that market conditions are not favorable for receiving an adequate return on our investment in product development and commercialization;
- The amount of capital that we will have for our development programs and our projected costs for those programs;
- The issuance of patents to third parties that might block our use of the same or similar technology to develop a product candidate; and
- The views of the FDA and comparable foreign regulatory agencies on the pre-clinical product characterization studies required to file an IND in order to initiate human clinical testing of a therapeutic product candidate or to attain marketing approval for that product candidate, or to obtain an investigational device exemption for clinical trials, or clearance for a 510(k) application to market a medical device.

Other Products and Product Candidates

Neural Stem Cells

During January 2020, we began a research collaboration under a Sponsored Research Agreement with the University of California at Irvine (UCI) using our PureStem[®] technology to derive neural stem cells, with the goal of developing cellular therapies to treat neurological disorders and diseases. The pace of work on the research project was slowed by COVID-19 safety procedures, but we expect the initial work to be concluded during 2022. The primary goal of the research will be to develop a robust method of deriving neural stem cells from PSCs in sufficient quantity and with sufficient purity and identity for use in cell based therapy. The initial focus will be on Huntington's disease, while other potential targets may include Parkinson's, Alzheimer's, and stroke. UCI has already accumulated safety and efficacy animal data that may support an IND submission to the FDA for the commencement of clinical trials to treat Huntington's disease.

The collaboration includes an opportunity for us to organize a company to be jointly owned with UCI and certain 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 to support IND submissions.

ESI BIO Research Products

We, through our ESI BIO research product division, market a number of products related to pluripotent stem cells including, research-grade as well as cGMP-grade human PSC lines. We plan to contract with third parties where the third parties to allow them to utilize cGMP PSC lines in defined fields of application in exchange for certain compensation including the payment of royalties to us if they are successful in developing and commercializing a product.

Subsidiaries

AgeX has two operating subsidiaries, Reverse Bioengineering, Inc. ("Reverse Bio") and ReCyte Therapeutics, Inc. ("ReCyte"). Reverse Bio and ReCyte are early stage pre-clinical research and development companies.

AgeX will develop its revolutionary iTR[™] platform through Reverse Bio. Reverse Bio will allow for a dedicated focus on iTR[™] in terms of equity financing and advancing the iTR[™] technology to proof-of-concept in an animal model. AgeX's patent portfolio for iTR development have been assigned to Reverse Bio, but the future operations of Reverse Bio will depend in large measure on its ability to raise its own capital. ReCyte is involved in stem cell-derived endothelial and cardiovascular related progenitor cells for the treatment of vascular disorders and ischemic conditions. AgeX owns 100% and 94.8% of the outstanding capital stock of Reverse Bio and ReCyte, respectively. All material intercompany accounts and transactions have been eliminated in consolidation.

Manufacturing

We presently do not have any manufacturing facilities and we will need to rely on third party contract manufacturers for the production of our cell lines and product candidates and to comply with quality manufacturing processes and controls.

Facilities

Until December 31, 2020, when our lease expired, our offices and research laboratory were located in approximately 23,911 square feet of space in a building in an office and research park at 965 Atlantic Avenue, Alameda, California. On November 3, 2020, AgeX entered into a one year lease effective January 1, 2021 for office space only comprising of 135 square feet in a building in an office and research park at 1101 Marina Village Parkway, Suite 201, Alameda, California. In September 2021, AgeX extended its office lease for another year. Accordingly, we no longer have our own research laboratory facilities.

Commercialization Plan

With the exception of our research product sales which generate a trivial amount of revenues, we currently have no commercialized or marketed products such as FDA-approved drugs in our portfolio. As a result, we have not yet assembled an infrastructure for sales and marketing. At the point in time, if ever, that our product candidates approach clearance or approval, we plan to develop a commercial plan that may initially include strategic marketing partnerships.

Intellectual Property

Patents and Trade Secrets

We rely primarily on patents and contractual obligations with employees and third parties to protect our proprietary rights. We have sought, and intend to continue to seek, appropriate patent protection for important and strategic components of our proprietary technologies by filing patent applications in the U.S. and certain foreign countries. There are no assurances that any of our intellectual property rights will guarantee protection or market exclusivity for our products and product candidates. We also use license agreements both to access technologies developed by other companies and universities and to convey certain intellectual property rights to others. Our financial success will be dependent, in part, on our ability to obtain commercially valuable patent claims, to protect and enforce our intellectual property rights, and to operate without infringing upon the proprietary rights of others if we are unable to obtain enabling licenses.

The patents for our core programs are summarized below.

AGEX-BATI

Brown Adipose Tissue (BAT) Progenitor Cells: The pending patent applications related to BAT progenitor cells, which are owned by AgeX, include U.S. and international patent applications. The applications are directed to the differentiation of pluripotent stem cells (including hES cells) into progenitor cell types capable of making the cellular components of brown fat. The patents also describe culture and purification methods. The approximate expiration dates of the BAT patents, if issued, will range from 2034 to 2036. The AGEX-BATI1 product may also rely on the HyStem patents, which are described in detail below under the heading “*HyStem[®] Technology*”.

AGEX-VASCI

Vascular Progenitors: The pending patent application pertaining to purified vascular progenitor cells and embryonic vascular components are owned by AgeX or an AgeX subsidiary or licensed from Lineage. The patents include U.S. patent applications and are directed to methods to enhance vascular tube networks, compositions of pericyte progenitor cells, compositions of exosomes containing angiogenic molecules, compositions of vascular and lymphatic cells, and methods to culture and purify the cells or components thereof. The approximate expiration dates of the vascular progenitor patents, if issued, range from 2032 to 2038. We plan to file an international patent application claiming priority from a pending US provisional application by the filing deadline, which could lead to a patent that if issued would expire in 2039. The AGEX-VASCI1 product may also rely on the HyStem patents, which are described in detail below, under the heading “*HyStem[®] Technology*”.

AGEX-iTR1547 and AGEX-iTR1550

Induced Tissue Regeneration (iTRTM): The pending patent applications related to the iTR programs, which are owned by AgeX, include applications pending, for example, in the United States, Australia, Canada, China, Europe, Japan and a pending international patent application. These patents and patent applications are directed to compositions and methods for healing damaged tissue using the iTR treatment methods. The patent applications are also directed to treatment methods by regenerating aging tissue by modulating genes involved in tissue regeneration, including reprogramming cells and tissues back to a regenerative state. The approximate expiration dates of the iTR patents, if issued, will range from 2034 to 2041.

Other AGEX Licensed and Sublicensed Patents

PureStem[®] Progenitor Cells: The patents and pending applications related to our PureStem[®] technology include patents and applications in the United States, Canada, Europe and Australia. These patents are directed to methods for generating diverse isolated progenitor cell lines which generally do not express *COX7A1* and combinations of other methods for employing pluripotent stem cell lines suitable for clinical use. The pending applications are directed to clonally purified human embryonic progenitor cell lines and methods for reproducible, large scale production of clonally purified human embryonic progenitor cells, compositions and methods for generating diverse cell types, and assays useful in identifying hES cell lines and pluripotent cells resulting from the transcriptional reprogramming of somatic cells that have embryonic telomere length. The approximate expiration date of the PureStem[®] issued patents is 2031 and the approximate date of expiration of the pending patents, if issued, will range from 2029 to 2032.

The PureStem[®] patent portfolio includes patents and pending applications licensed from Advanced Cell Technology, Inc., which later became Ocata Therapeutics, Inc. (“Ocata”). The Ocata issued patents cover methods for reprogramming animal differentiated somatic cells to undifferentiated cells and methods for producing differentiated progenitor cells using morula-derived or inner cell mass cells from a blastocyst and expire from approximately 2020 to 2026. The Ocata pending applications relate to methods for the derivation of cells that have a reduced differentiation potential using PSCs, methods for reprogramming animal differentiated somatic cells to undifferentiated cells and methods for producing differentiated progenitor cells using morula-derived or inner cell mass cells from a blastocyst. The Ocata pending patents, if issued, will expire between 2020 and 2026.

HyStem[®] Technology: AgeX has a sublicense to the HyStem[®] technology from Lineage and the technology was originally developed by the University of Utah Research Foundation with patents issued in the United States, Canada, Switzerland, Germany, Spain, France, UK, Ireland, Italy, Luxembourg, Monaco, Japan, Australia, and South Africa. The patents have claims covering compositions, pharmaceutical compositions with living cells methods of crosslinking, methods of making, methods of administering the compositions, and the use of the synthetic extracellular matrix in both research and clinical applications. The expiration dates of the HyStem[®] patents range from 2023 to 2027.

ESI Human Embryonic Stem Cell (hES) Cell Lines: AgeX licenses rights to the ES Cell International Pte. Ltd. patent portfolio with patents issued in the United States, Australia, Israel, UK, Singapore, Japan, and applications pending in the US and Europe. The patents are directed to methods for the differentiation of or enhancing the differentiation of stem cells into cardiomyocytes, neural cells, and pancreatic endoderm cells, compositions of pancreatic progenitor cells, methods of promoting the attachment, survival and/or proliferation of substantially undifferentiated stem cells in culture, methods for identifying and selecting cardiomyocytes, methods of freezing stem cells or progenitor cells, methods for identifying cardiogenic factors, compositions and methods for modulating spontaneous differentiation of a stem cell, methods of modulating the differentiation of undifferentiated, pluripotent human embryonic stem cells in culture, isolated endodermal progenitor cells, methods for transducing human embryonic stem cells, cell culture systems. The pending applications are directed to methods for the differentiation of hES cells into the three cell lineages, including for example cardiomyocytes, skeletal muscle cells, vascular endothelial cells, and pancreatic endoderm cells, as well as various culture and purification methods and compositions and methods of treatment. The ESI issued patents will expire from 2019 to 2027, and the approximate date of expiration of the pending patents, if issued, will range from 2022 to 2027.

UniverCyte (HLA-G) Technology: In August 2018, we acquired from Escape Therapeutics patents and patent applications related to HLA-G-modified cells and methods of generating allogeneic cells with reduced risk of being rejected by patients regardless of the HLA class I haplotype. The patents and pending application related to our HLA-G modified cells technology include patents issued in the United States, Australia and Japan and applications are pending in the United States, Australia, Canada, China, Europe, Japan, Korea, and Singapore. The patents are directed to cells which are genetically modified to express a Human Leukocyte Antigen-G (HLA-G) and have reduced immunogenicity, and nucleic acid compositions useful for generating the genetically modified cells. The pending applications are directed to compositions and methods for generating cells which are genetically modified to express HLA-G having reduced immunogenicity, nucleic acid compositions useful for generating the genetically modified cells, and methods of producing artificial tissues using the genetically modified cells. The approximate expiration date of the UniverCyte[™] (HLA-G) issued patents is 2033 and the approximate date of expiration of the pending patents, if issued, will also be 2033. We intend to use the UniverCyte[™] technology in the development of our two lead product candidates, AGEX-BAT1 and AGEX-VASC1 for the treatment of Type II diabetes and peripheral vascular disease and ischemic heart disease, respectively. In addition, we may seek to license out or form collaborations for the use of our UniverCyte[™] technology.

General Risks Related to Obtaining and Enforcing Patent Protection

There is a risk that any patent applications that we file and any patents that we hold or later obtain could be challenged by third parties and be declared invalid or infringing on third-party claims. Litigation, interferences, oppositions, inter partes reviews or other proceedings are, have been and may in the future be necessary in some instances to determine the validity and scope of certain of our proprietary rights, and in other instances to determine the validity, scope or non-infringement of certain patent rights claimed by third parties to be pertinent to the manufacture, use or sale of our products. We may also face challenges to our patent and regulatory protections covering our products by third parties, including manufacturers of generics and biosimilars that may choose to launch or attempt to launch their products before the expiration of our patent or regulatory exclusivity. Litigation, interference, oppositions, inter partes reviews, administrative challenges or other similar types of proceedings are unpredictable and may be protracted, expensive and distracting to management. The outcome of such proceedings could adversely affect the validity and scope of our patent or other proprietary rights, hinder our ability to manufacture and market our products, require us to seek a license for the infringed product or technology or result in the assessment of significant monetary damages against us that may exceed any amounts that we may accrue on our consolidated financial statements as a reserve for contingent liabilities. An adverse determination in a judicial or administrative proceeding or a failure to obtain necessary licenses could prevent us from manufacturing or selling our products. Furthermore, payments under any licenses that we are able to obtain would reduce our profits derived from the covered products and services.

The enforcement of patent rights often requires litigation against third-party infringers, and such litigation can be costly to pursue. Even if we succeed in having new patents issued or in defending any challenge to issued patents, there is no assurance that our patents will be comprehensive enough to provide us with meaningful patent protection against our competitors.

In addition to relying on patents, we rely on trade secrets, know-how, and continuing technological advancement to maintain our competitive position. We have entered into intellectual property, invention, and non-disclosure agreements with our employees, and it is our practice to enter into confidentiality agreements with our consultants. There can be no assurance, however, that these measures will prevent the unauthorized disclosure or use of our trade secrets and know-how, or that others may not independently develop similar trade secrets and know-how or obtain access to our trade secrets, know-how, or proprietary technology.

Our Licensing Arrangements

License Agreement with Lineage: iTRTM, PureStem[®] and Telomere Length

Concurrently with the contribution of assets to us by Lineage under an Asset Contribution and Separation Agreement, we entered into a License Agreement with Lineage pursuant to which Lineage has licensed to us, with rights to sublicense, certain intellectual property, including patents and patent applications and know-how for use in the development, manufacture and commercialization of products or services for the prevention, treatment, amelioration, diagnosis or monitoring of all human and non-human animal diseases and conditions except for the field of medical products, devices and services for the reserved Lineage fields of orthopedic, ophthalmic, and medical aesthetic uses (the “Lineage Exclusive Field”). In addition, Lineage retains an option right, on terms to be negotiated, to license iTR patents in research, development, manufacturing and commercialization of treatments based on iTR in the Lineage Exclusive Field. The licensed patents and know-how relate generally to (a) Lineage’s PureStem[®] human embryonic progenitor cell lines, and (b) telomere length and DNA quality control analysis in pluripotent stem cells.

The Lineage patent rights licensed to us are exclusive and worldwide except for existing third-party licenses, and for medical products, devices, and services related to tendon. We additionally received an option to license certain Lineage retained rights outside of orthopedic indications unless a license grant would compete with a Lineage program or products in the Lineage Exclusive Field.

The License Agreement contains customary provisions pertaining to patent maintenance, enforcement, and defense and related cost allocations, insurance, indemnification, and termination of the license in the event of a breach or default by a party, or the bankruptcy or other insolvency event with respect to a party.

Additional License and Sublicense Agreements

Lineage and certain Lineage subsidiaries also entered into agreements pursuant to which they have licensed or sublicense to us, on a non-exclusive, world-wide, royalty bearing basis, certain additional patents and patent rights and know-how relating to Lineage HyStem[®] hydrogel technology, human embryonic progenitor cell technology, and human pluripotent stem cell lines and technology for use outside the Lineage Exclusive Fields, or in the case of certain sublicense rights, fields previously licensed to third parties.

Hydrogel Patent License and Sublicense

Lineage has granted to us a sublicense of certain patents licensed to Lineage by the University of Utah Research Foundation (the “Utah Sublicense”), and has granted to us a direct license of certain patents held by Lineage (the “HyStem License”), related to HyStem[®] hydrogel technology for use outside of the Lineage Exclusive Field for products that include cells and that are covered by certain other patents contributed, licensed, or sublicensed to us by Lineage. We may only develop, sell, and otherwise commercialize a product under the Utah Sublicense and HyStem License if we spend at least a low seven figure amount on research with respect to the product. Lineage will agree to provide us with a reasonable amount of the hydrogel product for the purpose of our research for we will pay Lineage’s cost of manufacturing and supplying the hydrogel.

The Utah Sublicense and the HyStem License will not permit sublicensing and will be non-exclusive for medical products, devices, and services related to human tendon, and will be exclusive for all other licensed fields. The Utah Sublicense and HyStem License will expire upon the latest expiration date of a sublicensed or licensed patent, unless terminated earlier pursuant to the respective agreements. We will pay Lineage a royalty, in an amount not exceeding 10 percent, on “net sales” as defined in the Utah Sublicense and HyStem License. Commencing June 30, 2019, and for each 12-month period thereafter, we will pay Lineage a minimum royalty in the low five figures regardless of the actual amount of net sales for the applicable period.

The foregoing description of the HyStem License and the Utah Sublicense is qualified in its entirety by reference to the HyStem License Agreement and the Utah Sublicense Agreement, copies of which are filed as Exhibits to our Registration Statement on Form 10 and are incorporated herein by reference.

Sublicense of Certain Progenitor Patents

Lineage has granted to us a sublicense of certain patents licensed to Lineage that pertain to the derivation of human embryonic progenitor cell lines. The sublicense will permit us to use the sublicensed patents for the treatment, palliation, diagnosis, or prevention of any disease, disorder or health condition outside of the Lineage Exclusive Field. The sublicense expires the later of July 10, 2028 or the latest expiration date of a sublicensed patent, unless terminated earlier pursuant to the terms of the sublicense.

We will pay Lineage a royalty on “net sales,” as defined in the sublicense agreement, until the royalty payments to Lineage’s licensor by Lineage total \$1.2 million and thereafter will pay to Lineage a low single digit royalty on its own net sales and a low double digit royalty on sublicensing consideration.

If we grant a sublicense to use the patents, we will pay Lineage a portion of any consideration received for a sublicense, including but not limited to, upfront payments and milestones, and non-cash exchanges or considerations, but not payments for developing a product, service or process. If we become obligated to pay royalties to one or more affiliates of Lineage for the use of patent rights related to this sublicense and as a result, the royalties payable to Lineage with respect to royalties under the sublicense plus the royalties payable to the affiliates would exceed a designated amount of net sales, the royalties due to Lineage may be reduced but not less than the designated amount. In addition, we will pay to Lineage a royalty on “net sales,” as defined in the sublicense agreement, by the sublicensee. If we become obligated to pay royalties to one or more affiliates of Lineage for the use of patent rights related to this sublicense and as a result, the royalties payable to Lineage with respect to sales by a sublicensee plus the royalties payable to the affiliates would exceed a designated amount of net sales, the royalty due on net sales by the sublicensee may be reduced but not less than the designated amount.

The sublicense agreement includes reciprocal cross-licenses between Lineage and us with respect to any new patents that may be issued based on the use of the sublicensed patents. Any such license to Lineage will be exclusive in the Lineage Exclusive Field and nonexclusive in all other licensed fields. Any such license from Lineage to us will be for use outside the Lineage Exclusive Field and for medical products or services involving tendon. Each license will be for a term of 10 years.

The foregoing description of the sublicense agreement is qualified in its entirety by reference to the sublicense agreement, a copy of which is filed as an exhibit to our Registration Statement on Form 10 and is incorporated herein by reference.

ESI License

Lineage’s subsidiary ES Cell International Pte (“ESI”) has granted to us non-exclusive rights to certain ESI patents and human pluripotent stem cell lines, or ESI Cell Lines, for use outside of the Lineage Exclusive Field and outside certain other fields for which ESI has previously granted licenses. We will pay ESI a 2% royalty on “net sales,” as defined in the license agreement. If we become obligated to pay royalties to one or more third party or to Lineage for the use of patent rights related to this license and as a result the royalties payable to ESI with respect to this license agreement plus the royalties payable to such third party or Lineage would exceed a designated amount of net sales, the royalty due on net sales by the sublicensee may be reduced. The patent license expires upon the latest expiration date of a licensed patent, unless terminated earlier pursuant to the terms of the license. All other rights under the license are terminable by either party under the conditions specified in the license.

If we grant rights to any third party to use ESI Cell Lines derived under cGMP, we will pay ESI a share of all consideration that we receive as consideration for the grant of those rights, including all cash and non-cash consideration but not royalties. We are not permitted to grant sublicenses to the licensed ESI patents but may sublicense the use of ESI Cell Lines.

AgeX also will pay ESI 5% of any fees that AgeX may receive for providing third parties with a “drug master file” for submission to the FDA or similar regulatory agencies in other jurisdictions that may be used to provide confidential detailed information about facilities, processes or articles used in the manufacturing, processing, packaging and storing of one or more human drugs, including but not limited to biologics, cell lines and cell products.

AgeX has agreed not to provide ESI cell lines to third parties for use to develop cell therapies to treat spinal cord injury, and has agreed to allow ESI to designate up to three oncology indications to be treated by dendritic cell therapies derived from ESI cell lines which, through a subsequent amendment to the License Agreement, will be designated as exclusive ESI fields for which AgeX will not provide ESI cell lines to third parties.

The foregoing description of the ESI License Agreement is qualified in its entirety by reference to the ESI License Agreement, a copy of which is filed as an exhibit to our Registration Statement on Form 10 and is incorporated herein by reference.

Competition

The biotechnology industry is highly competitive and characterized by rapid change (even disruptive advances) that challenge the ability of any one company to maintain leadership. Therefore, we face competition on multiple fronts, including from other biotechnology companies, large pharmaceutical companies, academic institutions and government research entities. We believe the competitive advantages of our technology platform and resulting product candidates arise from the large market opportunities addressed by our product candidates, their anticipated safety profile, the expected cost of manufacture of off-the-shelf products, our intellectual property, as well the fundamental and widespread role of cell aging and regeneration in human age-related degenerative disease.

There are numerous biotechnology companies developing therapeutics for human aging, with each company often focusing on a specific molecular pathway within cells. For example, ResTORbio, Inc. is developing modulators of the mechanistic target of rapamycin (mTOR) pathway to treat immunological and cardiovascular disorders. Calico Life Sciences LLC is a Google-founded research and development company aimed at identifying molecular pathways that control animal lifespan and translating these insights into novel therapeutics designed to increase human healthspan. Calico has not disclosed its lead product development plans. Unity Biotechnology, Inc. focuses on cellular senescence, in particular, the use of agents that can target senescent cells for selective ablation (senolysis). Unity's stated targeted age-related diseases include osteoarthritis as well as other ophthalmological and pulmonary diseases. In addition, Altos Labs, Inc. (Altos) has reportedly received funding commitments in excess of \$3 billion for research and development of products relating to age-reprogramming. The initial technology focus disclosed by Altos may compete with the iTR program within AgeX and its subsidiary Reverse Bio.

Our therapeutic product candidates in development are likely to face competition from a large number of companies and technological strategies including therapeutics intended to address our lead indications, including:

- Type II diabetes: current standard of care treatments (though not necessarily focused on the root cause of the disease) include dieting and exercise programs to reduce weight, or pharmacological interventions with a wide array of medications, including: Metformin (Glucophage, Glumetza, or others); (DiaBeta, Glynase), glipizide (Glucotrol) and glimepiride (Amaryl); Meglitinides (repaglinide (Prandin) and nateglinide (Starlix)); Thiazolidinediones (rosiglitazone (Avandia) and pioglitazone (Actos)); DPP-4 (sitagliptin (Januvia), saxagliptin (Onglyza) and linagliptin (Tradjenta)); GLP-1 receptor agonists (exenatide (Byetta) and liraglutide (Victoza)); SGLT2 inhibitors (canagliflozin (Invokana) and dapagliflozin (Farxiga)); and insulin therapy (Insulin glulisine (Apidra), Insulin lispro (Humalog), Insulin aspart (Novolog), Insulin glargine (Lantus), Insulin detemir (Levemir), Insulin isophane (Humulin N, Novolin N)).
- Vascular ischemiam, including myocardial ischemia: current standard of care treatments including dieting, lowered intake of cholesterol, daily aspirin as a blood thinner; pharmacological agents including but not limited to nitrates as vasodilators (nitroglycerin sublingual tablet (Nitrostat), nitroglycerin transdermal ointment (Nitro-Bid), and isosorbide mononitrate and dinitrate (Isordil, Isordil Titradose, Dilatrate-SR)); beta blockers (atenolol (Tenormin), metoprolol (Lopressor, Toprol XL), and nadolol (Corgard)); calcium channel blockers (amlodipine (Norvasc), amlodipine and atorvastatin (Caduet), amlodipine and benazepril (Lotrel), diltiazem (Cardizem), felodipine (Cardene, Cardene SR), and verapamil (Calan); cholesterol-lowering medications such as statins atorvastatin (Lipitor), rosuvastatin (Crestor), and simvastatin (Zocor); Angiotensin-converting enzyme (ACE) inhibitors (Ranolazine (Ranexa), benazepril (Lotensin), and lisinopril (Prinivil, Zestril, Qbrelis)); and surgical procedures to increase circulation including but not limited to angioplasty and stenting, coronary artery bypass surgery, and enhanced external counterpulsation.

Many of our competitors have greater financial, collaborative, technical, regulatory, and human resources as well as products more advanced in development than our product pipeline, including products already marketed for our target indications. As a result, these competitors may have great success in obtaining regulatory approvals, reimbursement, or market acceptance. Our competitors, may have greater success in attracting qualified personnel, recruiting clinical trial sites, or in establishing strategic partnerships with larger pharmaceutical companies to fund large late-stage clinical trials or product marketing. In addition, our future business could be limited should our competitors commercialize products demonstrated to be more effective, safer, or less expensive than our comparable products.

Government Regulation and Product Approval

Government authorities at the federal, state, and local level, and in other countries, extensively regulate among other things, the development, testing, manufacture, quality, approval, safety, efficacy, distribution, labeling, packaging, storage, record keeping, marketing, import/export, and promotion of drugs, biologics, and medical devices. Authorities also heavily regulate many of these activities for human cells, tissues, and cellular and tissue-based products ("HCT/Ps").

FDA and Foreign Regulation of Therapeutic Products

The FDA and foreign regulatory authorities will regulate our proposed products as drugs, biologicals, or medical devices, depending upon such factors as: the use to which the product will be put, the chemical composition of the product, and the interaction of the product with the human body. In the United States, the FDA regulates drugs and biologicals under the Federal Food, Drug and Cosmetic Act ("FDCA"), the Public Health Service Act ("PHSA"), and implementing regulations. In addition, establishments that manufacture human cells, tissues, and cellular and tissue-based products are subject to additional registration and listing requirements, including current good tissue practice regulations. To the extent AgeX develops cellular and tissue-based products or therapies, its products will be subject to review by the FDA staff in its Center for Biologics Evaluation and Research ("CBER") Office of Cellular, Tissue, and Gene Therapies. In some instances, AgeX's clinical study protocol for a cell therapy product must be reviewed by the National Institute of Health through its Recombinant DNA Advisory Committee.

Any human drug and biological products that we may develop for testing, marketing, or use in the United States will be subject to rigorous FDA review and approval procedures. After testing in animals to evaluate the potential efficacy and safety of the product candidate, an investigational new drug (“IND”) submission must be made to the FDA to obtain authorization for human testing. Extensive clinical testing, which is generally done in three phases, must then be undertaken at a hospital or medical center to demonstrate optimal use, safety, and efficacy of each product in humans. Each clinical study is conducted under the auspices of an independent Institutional Review Board (“IRB”). The IRB will consider, among other things, ethical factors, the safety of human subjects, and the possible liability of the institution.

Clinical trials are generally conducted in three “phases.” Phase I clinical trials are conducted in a small number of healthy volunteers or volunteers with the target disease or condition to assess safety. Phase II clinical trials are conducted with groups of patients afflicted with the target disease or condition in order to determine preliminary efficacy, optimal dosages and expanded evidence of safety. In some cases, an initial trial is conducted in diseased patients to assess both preliminary efficacy and preliminary safety, in which case it is referred to as a Phase I/II trial. Phase III trials are large-scale, multi-center, comparative trials and are conducted with patients afflicted with the target disease or condition in order to provide enough data to demonstrate the efficacy and safety required by the FDA. The FDA closely monitors the progress of each of the three phases of clinical testing and may, at its discretion, re-evaluate, alter, suspend, or terminate the clinical trial based upon the data which have been accumulated to that point and its assessment of the risk/benefit ratio to the intended patient population. All adverse events must be reported to the FDA. Monitoring of all aspects of the study to minimize risks is a continuing process. The time and expense required to perform this clinical testing can far exceed the time and expense of the research and development initially required to create the product.

No action can be taken to market any therapeutic product in the U.S. until an appropriate New Drug Application (“NDA”) or Biologics License Application (“BLA”) has been approved by the FDA. Submission of the application is no guarantee that the FDA will find it complete and accept it for filing. If an application is accepted for filing, following the FDA’s review, the FDA may grant marketing approval, request additional information, or deny the application if it determines that the application does not provide an adequate basis for approval. FDA regulations also restrict the export of therapeutic products for clinical use prior to FDA approval. To date, the FDA has not granted marketing approval to any pluripotent stem-based therapeutic products and it is possible that the FDA or foreign regulatory agencies may subject our product candidates to additional or more stringent review than drugs or biologicals derived from other technologies.

The FDA offers several programs to expedite development of products that treat serious or life-threatening illnesses and that provide meaningful therapeutic benefits to patients over existing treatments. A product may be eligible for breakthrough therapy designation if it treats a serious or life-threatening disease or condition and preliminary clinical evidence indicates it may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints. In 2017, FDA established a new regenerative medicine advanced therapy (“RMAT”) designation as part of its implementation of the 21st Century Cures Act. An RMAT is defined as a cell therapy, therapeutic tissue engineering product, human cell and tissue product, or any combination product using such therapies or products, with limited exceptions that is intended to treat, modify, reverse, or cure a serious or life-threatening disease or condition; and preliminary clinical evidence indicates that it has the potential to address unmet medical needs for such a disease or condition. RMAT designation provides potential benefits that include more frequent meetings with FDA to discuss the development plan for the product candidate and eligibility for rolling review and priority review. Products granted RMAT designation may also be eligible for accelerated approval on the basis of a surrogate or intermediate endpoint reasonably likely to predict long-term clinical benefit, or reliance upon data obtained from a meaningful number of sites, including through expansion to additional sites. Once approved, when appropriate, the FDA can permit fulfillment of post-approval requirements under accelerated approval through the submission of clinical evidence, clinical studies, patient registries, or other sources of real world evidence such as electronic health records; through the collection of larger confirmatory datasets; or through post-approval monitoring of all patients treated with the therapy prior to approval.

Some of our future products may be eligible for RMAT designation. There is no assurance that the FDA will grant breakthrough therapy, accelerated approval or RMAT status to any of our product candidates.

In addition to regulations in the United States, we are subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our products. Whether or not we obtain FDA approval for a drug candidate, we must obtain approval by the comparable regulatory authorities of foreign countries or economic areas, such as the European Union, before we can commence clinical trials or market products in those countries or areas. The approval process and requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from place to place, and the time may be longer or shorter than that required for FDA approval.

Combination Products

If we develop any products that are used with medical devices, they may be considered combination products, which are defined by the FDA to include products comprised of two or more regulated components or parts such as a biologic and a device. For example, we may use HyStem[®] hydrogels to administer one or more pluripotent stem cell-based therapy products. When regulated independently, biologics and devices each have their own regulatory requirements. However, regulatory requirements for a combination product comprised of a biologic administered with a delivery device can be more complex, because in addition to the individual regulatory requirements for each component, additional combination product regulatory requirements may apply.

510(k) Medical Devices & Notification

Product marketing in the U.S. for most Class II and limited Class I devices typically follows a 510(k) pathway. To obtain 510(k) clearance, a manufacturer must submit a premarket notification demonstrating that the proposed device is substantially equivalent to a legally marketed device, referred to as the predicate device. A predicate device may be a previously 510(k) cleared device or a device that was in commercial distribution before May 28, 1976 for which the FDA has not yet called for submission of PMA applications, or a product classification created by FDA when it granted de novo authorization. The manufacturer must show that the proposed device has the same intended use as the predicate device, and it either has the same technological characteristics, or it is shown to be equally safe and effective and does not raise different questions of safety and effectiveness as compared to the predicate device.

There are three types of 510(k)s: traditional; special, for devices that are modified and the modification needs a new 510(k) but the modification does not affect the intended use or alter the fundamental scientific technology of the device; and abbreviated, for devices that conform to a recognized standard. The special and abbreviated 510(k)s are intended to streamline review. The FDA intends to process special 510(k)s within 30 days of receipt and abbreviated 510(k)s within 90 days of receipt. Though statutorily required to clear a traditional 510(k) within 90 days of receipt, the clearance pathway for traditional 510(k)s can take substantially longer.

After a device receives 510(k) clearance, any modification that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, requires a new 510(k) clearance or could require a PMA approval. The FDA requires each manufacturer to make this determination in the first instance, but the FDA can review any such decision. If the FDA disagrees with a manufacturer's decision not to seek a new 510(k) clearance, the agency may retroactively require the manufacturer to seek 510(k) clearance or PMA approval. The FDA also can require the manufacturer to cease marketing and/or recall the modified device until 510(k) clearance or PMA approval is obtained.

Post-Approval Matters

Even after initial FDA approval has been obtained, further studies may be required to provide additional data on safety or to gain approval for the use of a product as a treatment for clinical indications other than those initially targeted. Data resulting from these clinical trials may result in expansions or restrictions to the labeled indications for which a product has already been approved.

FDA Regulation of Manufacturing

The FDA regulates the manufacturing process of pharmaceutical products, human tissue and cell products, and medical devices, requiring that they be produced in compliance with cGMP. The FDA regulates and inspects equipment, facilities, laboratories, and processes used in the manufacturing and testing of products prior to providing approval to market products. If after receiving approval from the FDA, a material change is made to manufacturing equipment or to the location or manufacturing process, additional regulatory review may be required. The FDA also conducts regular, periodic visits to re-inspect the equipment, facilities, laboratories and processes of manufacturers following an initial approval. If, as a result of those inspections, the FDA determines that that equipment, facilities, laboratories or processes do not comply with applicable FDA regulations and conditions of product approval, the FDA may seek civil, criminal or administrative sanctions and/or remedies against the manufacturer, including suspension of manufacturing operations. Issues pertaining to manufacturing equipment, facilities or processes may also delay the approval of new products undergoing FDA review.

Federal Funding of Research

The National Institutes of Health ("NIH") has adopted guidelines on the use of hES cells in federally funded research, consistent with President Obama's Executive Order which rescinded President Bush's Executive Orders that permitted federal funding of research on hES cells using only the limited number of hES cell lines. The central focus of the guidelines is to assure that hES cells used in federally funded research are derived from human embryos that were created for reproductive purposes, are no longer needed for this purpose, and are voluntarily donated for research purposes with the informed written consent of the donors. Those hES cells that were derived from embryos created for research purposes rather than reproductive purposes, and other hES cells that were not derived in compliance with the guidelines, are not eligible for use in federally funded research.

California State Regulations

The state of California has adopted legislation and regulations that require institutions that conduct stem cell research to notify, and in certain cases obtain approval from, a Stem Cell Research Oversight Committee ("SCRO Committee") before conducting the research. Under certain California regulations, all hES cell lines that will be used in our research must be acceptably derived. California regulations further require certain records to be maintained with respect to stem cell research and the materials used. AgeX programs that involve the use of stem cells will be reviewed by a SCRO Committee to confirm compliance with federal and state guidelines. The hES cell lines that we use are all on the NIH registry of lines that have been reviewed and meet standards for federal funding grants.

Health Insurance Portability and Accountability Act

Under the Health Insurance Portability and Accountability Act (“HIPAA”), the Department of Health and Human Services (“HHS”) has issued regulations to protect the privacy and security of protected health information used or disclosed by health care providers. HIPAA also regulates standardization of data content, codes, and formats used in health care transactions and standardization of identifiers for health plans and providers. Penalties for violations of HIPAA regulations include civil and criminal penalties.

The requirements under these regulations may periodically change and could have an effect on our business operations if compliance becomes substantially more costly than under current requirements. New laws governing privacy may also be adopted in the future. We can provide no assurance that we will remain in compliance with diverse privacy requirements in all of the jurisdictions in which we do business. Failure to comply with privacy requirements could result in civil or criminal penalties, which could have a materially adverse effect on our business.

Federal and State Fraud and Abuse Laws

We are also subject to various laws pertaining to healthcare “fraud and abuse,” including anti-kickback laws and false claims laws. Anti-kickback laws make it illegal to solicit, offer, receive or pay any remuneration in exchange for or to induce the referral of business, including the purchase or prescription of a particular drug that is reimbursed by a state or federal program. The term “remuneration” has been broadly interpreted to include anything of value. Several courts have interpreted the statute’s intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the Anti-Kickback Statute has been violated. The Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act, collectively the Affordable Care Act (“ACA”), among other things, amended the intent requirement of the federal Anti-Kickback Statute such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate, in order to commit a violation. Violations of fraud and abuse laws may be punishable by criminal and/or civil sanctions, including fines and civil monetary penalties, as well as by the possibility of exclusion from federal healthcare programs (including Medicare and Medicaid). Liability under the false claims laws may also arise when a violation of certain laws or regulations related to the underlying products (e.g., violations regarding improper promotional activity or unlawful payments) contributes to the submission of a false claim.

Additionally, the U.S. Foreign Corrupt Practices Act (“FCPA”) prohibits U.S. corporations and their representatives from offering, promising, authorizing or making payments to any foreign government official, government staff member, political party or political candidate in an attempt to obtain or retain business abroad. The scope of the FCPA includes interactions with certain healthcare professionals in many countries. Other countries have enacted similar anti-corruption laws and/or regulations.

Healthcare Reform

In the United States and foreign jurisdictions, there have been a number of legislative and regulatory changes to the healthcare system that could affect our future results of operations. There have been and continue to be a number of initiatives at the United States federal and state levels that seek to reduce healthcare costs.

In particular, the ACA has had, and is expected to continue to have, a significant impact on the healthcare industry. The ACA was designed to expand coverage for the uninsured while at the same time containing overall healthcare costs. Substantial new provisions affecting compliance have also been enacted, which may require us to modify our business practices with healthcare providers and entities, and a significant number of provisions are not yet, or have only recently become, effective.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the ACA, and there may be additional challenges and amendments to the ACA in the future, including efforts to implement changes to the law that may impact reimbursement for drugs and biologics.

Further, there has been heightened government scrutiny over the manner in which manufacturers set prices for their marketed pharmaceutical products. Such scrutiny has resulted in several recent Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to pharmaceutical product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. Such proposals have included, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B and to allow some states to negotiate drug prices under Medicaid. The Department of Health and Human Services has already started the process of soliciting feedback on some of these measures and, at the same, is immediately implementing others under its existing authority. Although some of these and other proposals will require authorization through additional legislation to become effective, Congress and the President are likely to continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures have become increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

It is uncertain whether and how future legislation, whether domestic or foreign, could affect prospects for our product candidates or what actions foreign, federal, state, or private payors for health care treatment and services may take in response to any such health care reform proposals or legislation. Adoption of price controls and other cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures reforms may prevent or limit our ability to generate revenue, attain profitability or commercialize our product candidates.

Moreover, the Drug Supply Chain Security Act (the “DSCSA”) imposes obligations on manufacturers of pharmaceutical products, among others, related to product tracking and tracing. While some requirements of the DSCSA began in November 2014, many key requirements, development of standards, and the system for product tracing will continue to be phased in until 2023. Among the requirements of the DSCSA, manufacturers will be required to provide certain information regarding the drug product to individuals and entities to which product ownership is transferred, label drug product with a product identifier, and keep certain records regarding the drug product. The transfer of information to subsequent product owners by manufacturers will eventually be required to be done electronically. Manufacturers will also be required to verify that purchasers of the manufacturers’ products are appropriately licensed. Further, under this new legislation, manufacturers will have drug product investigation, quarantine, disposition, and notification responsibilities related to counterfeit, diverted, stolen, and intentionally adulterated products, as well as products that are the subject of fraudulent transactions or that are otherwise unfit for distribution such that they would be reasonably likely to result in serious health consequences or death.

Reimbursement

Medicare, Medicaid, and Third-Party Reimbursement Programs

Sales of the therapeutic products and medical devices that we and our subsidiaries may develop will depend, in part, on the extent to which the costs of those products will be covered by third-party payors, such as government health programs, commercial insurance, and managed healthcare organizations.

The containment of healthcare costs has become a priority of federal and state governments and the prices of drugs have been a focus in this effort. In the United States, the federal and many state governments have adopted or proposed initiatives relating to Medicaid and other health programs that may limit reimbursement or increase rebates that providers are required to pay to the state. In addition to government regulation, managed care organizations in the United States, which include medical insurance companies, medical plan administrators, health-maintenance organizations, hospital and physician alliances and pharmacy benefit managers, continue to put pressure on the price and usage of healthcare products. Managed care organizations and third-party payors seek to contain healthcare expenditures, and their purchasing strength has been increasing due to their consolidation into fewer, larger organizations and a growing number of enrolled patients. Adoption of price controls, cost-containment measures, and more restrictive policies in jurisdictions with existing controls and measures, could further limit our net revenue and results. If third-party payors do not consider the products we develop to be cost-effective compared to other therapies, they may not cover our products as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our products on a profitable basis.

Efforts by government agencies and state legislatures in the United States could affect us and our industry. The ACA increased many of the mandatory discounts and rebates and imposed a new Branded Prescription Pharmaceutical Manufacturers and Importers fee payable by manufacturers. The new U.S. presidential administration has identified repealing and replacing the ACA as a priority. The timing and method of the full or partial repeal or amendment of the ACA or the adoption of new healthcare legislation remains uncertain, but impending changes will likely impact the number of patient lives covered, the quality of the insurance, Medicaid eligibility and the level of patient protections provided.

Other legislative and regulatory actions that would have a significant impact include: changes to how the Medicare program covers and reimburses current and future drugs, changes in the Federal payment rate or new rebate requirements for covered drugs and policies for payment in Medicare or Medicaid; and changes to coverage and payment for biosimilars, including the current Medicare biosimilar coverage and payment policies intended to encourage biosimilar adoption, or other policies that provide easier substitution or reimbursement advantages.

We face similar issues outside of the United States. In some non-U.S. jurisdictions, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the EU provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for a medicinal product, or it may instead adopt a system of direct or indirect controls on the profitability of placing a medicinal product on the market. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products. Historically, products launched in the EU do not follow price structures of the United States and generally tend to be significantly lower.

Employees

As of December 31, 2021, we employed 5 persons on a full-time basis and 5 persons on a part-time basis. Two full-time and one part-time employees hold Ph.D.'s in one or more fields of science.

Item 1A. Risk Factors

Our business is subject to various risks, including those described below. You should consider the following risk factors, together with all of the other information included in this Report, which could materially adversely affect our proposed operations, our business prospects, and financial condition, and the value of an investment in our business. There may be other factors that are not mentioned here or of which we are not presently aware that could also affect our business operations and prospects.

Risks Related to Our Financial Condition and Capital Resources

We are a discovery-stage development company with limited capital resources and have incurred operating losses since our inception. We anticipate that we will incur continued losses for the foreseeable future and will need to continue to raise capital to finance our operations, and we do not know if we will ever attain profitability.

We are a discovery-stage therapeutics company with a limited operating history and limited capital resources. Since our inception in August 2017, we have incurred operating losses and negative cash flows and we expect to continue to incur losses and negative cash flow in the future. Our net operating losses from continuing operations were \$8.6 million and \$10.4 million for the years ended December 31, 2021 and 2020, respectively, and we had an accumulated deficit of approximately \$105.7 million as of December 31, 2021. See Note 3 to our consolidated financial statements included in this Report for a discussion of discontinued operations.

These net losses and negative cash flows have had, and will continue to have, an adverse effect on our stockholders' equity and working capital. We expect to continue to incur significant additional operating losses for the foreseeable future and will need to continuously raise additional capital to fund our operations. The amount of our expenses and anticipated losses will depend on our capital resources and whether we license out product development to third parties or participate ourselves directly or financially with collaborators in research, development and commercialization efforts. Our capital needs will increase greatly if we advance our product candidates through clinical trials and seek regulatory approval and, if we receive FDA approval, commercialize our product candidates ourselves.

The amount of our future net losses will depend, in part, on the rate of future growth of our expenses, our ability to raise the capital needed to continue our operations, and our ability to generate revenues. If we or any licensees or collaborators are unable to develop and commercialize one or more of our product candidates, or if revenues from any product candidates that receive marketing approval are insufficient, we will not achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability. If we are unable to achieve and then maintain profitability, the value of our equity securities will be materially and adversely affected.

We need additional financing to execute our operating plan and continue to operate as a going concern.

As required under Accounting Standards Update 2014-15, Presentation of Financial Statements-Going Concern (ASC 205-40), we have the responsibility to evaluate whether conditions and/or events raise substantial doubt about our ability to meet our future financial obligations as they become due within one year after the date the financial statements are issued. Based on our most recent projected cash flows, we believe that our cash and cash equivalents, even with the amount of credit remaining available under our loan agreements with Juvenescence, and the proceeds of up to \$12.1 million we may receive from the sale of additional shares of our common stock in "at-the-market" transactions through a Sales Agreement with Chardan Capital Markets, LLC ("Chardan") as a sales agent, would not be sufficient to satisfy our anticipated operating and other funding requirements for the next twelve months from the date of filing of this Report. These factors raise substantial doubt regarding our ability to continue as a going concern and the report of our independent registered public accountants accompanying our audited consolidated financial statements in this Report contains a qualification to such effect.

We have incurred operating losses and negative cash flows since inception and had an accumulated deficit of \$105.7 million as of December 31, 2021. We expect to continue to incur operating losses and negative cash flows. Because we will continue to experience net operating losses, our ability to continue as a going concern is subject to our ability to obtain necessary capital from outside sources, including obtaining additional capital from the sale of our common stock or other equity securities or assets, obtaining additional loans from financial institutions or investors, and entering into collaborative research and development arrangements or licensing some or all of our patents and know-how to third parties while retaining a royalty and other contingent payment rights related to the development and commercialization of products covered by the licenses. Our continued net operating losses and the risks associated with the development of our product candidates and technologies, and our deferral of in-house development of our product candidates and technologies in connection with recent reductions in staffing and the closing of our research laboratory facilities, will increase the difficulty in obtaining such capital, and there can be no assurances that we will be able to obtain such capital on favorable terms or at all. If we are unable to raise capital when needed, we may be forced to delay, reduce or eliminate our research and development activities, or ultimately not be able to continue as a going concern.

Our ability to borrow additional funds from the line of credit under our 2022 Secured Convertible Promissory Note with Juvenescence is subject to Juvenescence’s discretion in funding our requests for loans, and all of the loans are collateralized by our assets, including shares of our subsidiaries.

During February 2022 we obtained a \$13,160,000 line of credit from Juvenescence under the terms of a Secured Convertible Promissory Note (the “Secured Note”). We drew an initial \$8,160,000 of the line of credit and used \$7,160,000 to pay the outstanding principal and other amounts due as loan origination fees under its 2019 Loan Facility Agreement, as amended, with Juvenescence. The remaining \$5 million of the line of credit may be drawn down from time to time until February 14, 2023 subject to Juvenescence’s discretion to approve each loan draw. AgeX may not draw more than \$1 million in any subsequent single draw. The outstanding principal balance of the Secured Note will become due and payable on February 14, 2024 (the “Repayment Date”). Our obligations under the Secured Note are collateralized by all of our assets, including the shares of common stock we hold in subsidiaries ReCyte Therapeutics and Reverse Bio, under the terms of a Security Agreement. If Event of Default, as defined in the Secured Note were to occur, Juvenescence could foreclose on its security interest and sell our assets to satisfy the unpaid principal balance of those loans plus certain loan origination fees and costs incurred in connection with the Event of Default and the foreclosure and sale of the assets. As a result, we could lose some or all of respective assets, leaving few if any assets available for the operation of our business, or for sale for the benefit of our stockholders through a winding up of our affairs and liquidation of our assets.

The terms of our Secured Note and Security Agreement with Juvenescence could make it more difficult for us to raise additional capital from other sources.

The Secured Note includes certain covenants that among other matters such as financial reporting: (i) impose financial restrictions on AgeX while the Secured Note remains unpaid, including restrictions on the incurrence of additional indebtedness by AgeX and its subsidiaries, except that Reverse Bio will be permitted to incur debt convertible into equity not guaranteed or secured by the assets of AgeX or any other AgeX subsidiary, and the restrictions on the incurrence of indebtedness applicable to Reverse Bio will end if it raises more than \$15 million in debt or equity financing within 12 months from the date of the Secured Note; (ii) require that AgeX use loan proceeds and funds that may be raised through certain equity offerings only for research and development work, professional and administrative expenses, for general working capital, and for repayment of all or a portion of AgeX’s indebtedness to Juvenescence; and (iii) prohibit AgeX from making additional investments in subsidiaries, unless AgeX obtains the written consent of Juvenescence to a transaction that otherwise would be prohibited or restricted. Accordingly, the terms of the Secured Note and the grant of a security interest in our assets pursuant to the Security Agreement could make AgeX less attractive to new equity investors and could impair our ability to finance our operations or the operations of our subsidiaries from sources other than Juvenescence.

Raising additional capital may cause dilution to our stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.

Until such time, if ever, as we can generate substantial revenue, we may finance our cash needs through a combination of equity offerings, debt financings, strategic alliances and licensing arrangements. We do not currently have any committed external source of funds other than a Sales Agreement with Chardan pursuant to which we may sell up to \$12.1 million of our common stock in “at-the-market” sales, and as of March 14, 2022, the right to borrow up to an additional \$5.0 million in total, subject to Juvenescence’s discretion, under the Secured Note. We will need to seek additional capital regardless of market conditions and the terms of any financings that may be available to us.

To the extent that we raise additional capital through the sale of shares of our common stock or other equity securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Similarly, if Reverse Bio raises additional capital through the sale of equity securities or convertible debt securities AgeX’s interest in Reverse Bio will be diluted and the terms of equity securities issued by Reverse Bio may include liquidation or other preferences that adversely affect our rights as a common stockholder of Reverse Bio. We will need to issue additional common stock purchase warrants to Juvenescence in connection with any additional borrowings under the Secured Note, which to the extent issued will dilute the interests of our other stockholders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we or any of our subsidiaries raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we or our subsidiaries may be required to relinquish valuable rights to key technologies, future revenue streams, or product candidates, and any such licenses may be granted on terms that may not be favorable to us. If we or our subsidiaries are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Risks Related to Our Business Operations

Due to our limited financial resources, we have reduced our staffing, eliminated our research laboratory facilities, and eliminated in-house research and product development work. We will seek opportunities to outsource or license product development and commercialization but there is no assurance that we will be able to do so successfully.

During April 2020, we implemented a plan to reduce spending on employee salaries and consulting fees that resulted in large staff reductions, including the elimination of most of our research personnel and certain management and administrative personnel. We then subleased most of our former laboratory facility space and we did not renew the laboratory facility lease, or lease other laboratory facility space, after our lease expired at the end of 2020. As a result, we do not have a research laboratory facility or a research staff, and we have curtailed development of our product candidates and technologies except for certain research and development work that is being conducted under sponsored research agreements with certain universities and a limited amount of work contracted out to third party service providers. We also may license technologies or product development to, or enter into collaborative arrangements with, other companies in the cell therapy or biopharma industry to conduct research and development, manufacturing, and marketing for AgeX for particular product candidates, but there is no assurance that we will be able to enter into any such agreements on terms acceptable to us.

We may expend our limited resources to pursue one or more particular product candidates or indications and fail to pursue product candidates or indications that may be more profitable or for which there is a greater likelihood of success

Because we have limited financial and managerial resources, we may focus on research programs and product candidates that we identify for specific indications and we may seek to develop those product candidates through out-sourcing or out-licensing to third parties if we are able to make such arrangements. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that may later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to timely capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

We have not tested any of our product candidates in clinical trials. Success in early development and preclinical studies or clinical trials may not be indicative of results obtained in later preclinical studies and clinical trials.

Our product candidates have never been evaluated in human clinical trials, and we may experience unexpected or adverse results in the future if any human clinical trials of any of our product candidates are conducted. Typically, it takes about six to ten years to develop a new drug from the time it enters Phase 1 clinical trials to when it is approved for treating patients, but in many cases it may take longer, and the costs of advancing product candidates through clinical trials will be substantial and will tend to increase significantly with each successive clinical trial phase.

Adequate and well-controlled clinical trials will need to demonstrate that our product candidates are safe and effective, with a favorable benefit-risk profile, for use in their target indications before regulatory approvals can be sought for their commercial sale. Any positive results that may be observed for product candidates in preclinical animal models may not be predictive of future clinical trials in humans. Our product candidates may also fail to show the desired safety and efficacy in later stages of clinical development even if they successfully advance through initial clinical trials. Further, some or all of our cell-based therapies under development may require the genetic modification of the pluripotent master cell banks such that the resulting cells can escape immune rejection by the intended patient. There is no certainty that a genetic modification will provide a long-term solution to transplant rejection, or that the modified cells will not cause unanticipated health risks to the patient that could delay or even halt the development of the products.

Many companies in the biotechnology industry have suffered significant setbacks in late-stage clinical trials after achieving positive results in early-stage development and there is a high failure rate for product candidates proceeding through clinical trials. Data obtained from preclinical and clinical activities are subject to varying interpretations, which may delay, limit or prevent regulatory approval. Even if a clinical trial demonstrates statistical significance, regulatory agencies may not accept the use of the historical control. Regulatory delays or rejections may be encountered as a result of many factors, including changes in regulatory policy during the period of product development. We cannot be certain that any clinical trials and applications for marketing approval will not face similar setbacks.

Our choice of product candidates and our development plans for our product candidates are subject to change based on a variety of factors, and if we abandon development of a product candidate we may not be able to develop or acquire a replacement product candidate.

We may determine to abandon the development of one or more of our product candidates, or we may change the prioritization of the development of certain product candidates, or we may select or acquire and prioritize the development of new product candidates. Our choice and prioritization of product candidates for development will be influenced by a variety of factors, including but not limited to:

- the amount of capital that we will have for our development programs and our projected costs for those programs;
- our ability to enter into licensing or collaborative arrangements with other biotechnology or biopharma companies or universities with their own laboratory facilities and research staffs to conduct research and development of one or more product candidates;

- competitors may develop alternatives that render our potential product candidates obsolete or less attractive;
- potential product candidates we develop may nevertheless be covered by third parties' patents or other exclusive rights;
- potential product candidates may not be effective in treating their targeted diseases;
- potential product candidates may, on further study, be shown to have harmful side effects, toxicities or other characteristics that indicate that they are unlikely to be products that will receive marketing approval and achieve market acceptance;
- our analysis of market demand and market prices for the products we plan to develop could lead us to conclude that market conditions are not favorable for receiving an adequate return on our investment in product development and commercialization;
- a potential product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all; or
- the regulatory pathway for a potential product candidate is too complex and difficult to navigate successfully or economically.

We may determine to expand our organization and obtain laboratory facilities if we are able to raise sufficient capital to do so, and we may experience difficulties in managing this growth, which could disrupt our operations.

As of December 31, 2021, we had 10 employees. If we are able to obtain sufficient capital and determine to reinstitute our internal research and development efforts, we may have difficulty locating, leasing, and equipping a new laboratory facility and identifying, hiring and integrating new scientific and laboratory personnel. Many of the biotechnology companies that we compete against for qualified personnel and consultants have greater financial and other resources, different risk profiles and a longer history in the industry than we do and are better positioned to attract and retain personnel and consultants. If we are unable to continue to attract and retain high-quality personnel and consultants, the rate and success at which we can discover and develop product candidates and operate our business will be limited.

Future growth would impose significant additional responsibilities on our management, including the need to identify, recruit, maintain, motivate and integrate additional employees, consultants and contractors. Also, our management may need to divert a disproportionate amount of its attention away from our day-to-day activities and devote a substantial amount of time to managing these growth activities. We may not be able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Any growth of administrative resources could require significant capital expenditures and may divert financial resources from other projects, such as the development of product candidates. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate and/or grow revenues could be reduced, and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize our product candidates and compete effectively will depend, in part, on our ability to effectively manage any future growth.

The commercial success of any of our current or future product candidates will depend upon the degree of market acceptance by physicians, patients, third-party payors, and others in the medical community.

Even with approvals from the FDA and comparable foreign regulatory authorities, the commercial success of our products will depend in part on the health care providers, patients, and third-party payors accepting our product candidates as medically useful, cost-effective, and safe. Any product that we bring to the market may not gain market acceptance by physicians, patients, third-party payors and other health care providers. The clinical development, commercialization, and marketing of cell therapies are at an early-stage, substantially research-oriented, and financially speculative. To date, very few companies have been successful in their efforts to develop and commercialize cell therapies. In general, cell therapies may be susceptible to various risks, including undesirable and unintended side effects, unintended immune system responses, inadequate therapeutic efficacy, potentially prohibitive costs or other characteristics that may prevent or limit their approval or commercial use. Furthermore, the number of people who may use cell- or tissue-based therapies is difficult to forecast with accuracy. Our future success is dependent on the establishment of a large global market for cell therapies and our ability to capture a share of this market with our product candidates.

Even if we, a collaborator, or a licensee of our technology successfully develop and obtain regulatory approval for our product candidates, the market may not understand or accept them. Our product candidates represent novel treatments and are expected to compete with a number of more conventional products and therapies manufactured and marketed by others, including major pharmaceutical and biotechnology companies. The degree of market acceptance of any of our products will depend on a number of factors, including without limitation:

- the efficacy of the product as demonstrated in clinical studies and potential advantages over competing treatments;
- the prevalence and severity of the disease and any side effects;

- the clinical indications for which approval is granted, including any limitations or warnings contained in a product's approved labeling;
- the convenience and ease of administration;
- the cost of treatment, particular as additive to existing treatments;
- the willingness of the patients and physicians to accept and use these therapies and the perception of efficacy and safety of our approved products by such parties;
- the marketing, sales and distribution support for the products;
- the publicity and ethical, social and legal concerns regarding the use of embryonic stem cells for our products or competing products and treatments; and
- government regulations restricting or prohibiting our research or manufacturing processes for stem cells due to ethical, social and legal concerns regarding their use in medical research and treatment; and
- the pricing and availability of third-party insurance coverage and reimbursement.

Even if a product displays a favorable efficacy and safety profile upon approval, market acceptance of the product will initially remain uncertain. Efforts to educate the medical community and third-party payors on the benefits of the products may require significant investment and resources and may never be successful. If our products fail to achieve an adequate level of acceptance by physicians, patients, third-party payors, and other health care providers, we will not be able to generate sufficient revenue to become or remain profitable.

If the market opportunities for our product candidates are smaller than we believe they are, we may not meet our revenue expectations and, even assuming approval of a product candidate, our business may suffer.

Our projections of the number of potential users of our product candidates in the markets we are attempting to address are based on our beliefs and estimates and include several key assumptions based on our industry knowledge, industry publications, third-party research reports and other surveys. You should bear in mind the following:

- Our estimates have been derived from a variety of sources, including publications and scientific literature or market research estimating the total number of patients and currently approved or used therapies, as well as certain assumptions regarding the potential size of the market assuming broad regulatory approval or potential usage by physicians beyond the approved label, any of which may prove to be incorrect.
- The scope of approval and potential use may be significantly narrower, and the number of patients may turn out to be lower than expected.
- Competitive products or approaches may be approved or come into use by medical providers and the potentially addressable patient population for each of our product candidates may be limited or may not be amenable to treatment with our product candidates, and new patients may become increasingly difficult to identify or gain access to, any which could adversely affect our results of operations and our business.

If the actual market for any of our product candidates is smaller than we expect, our revenue may be limited and it may be more difficult for us to achieve or maintain profitability.

We will face risks related to the manufacture of medical products for any product candidates that we develop.

The manufacture of medical products, and in particular biologics, is complex and requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls, none of which we presently have. Unless we are able to raise the capital required to construct our own manufacturing facilities and are able to develop the expertise to manage and operate a manufacturing facility of our own, we may need to rely on third-party manufacturers to manufacture any products that we develop. There is no assurance that we will be able to identify manufacturers on acceptable terms or at all. Regardless of whether we do our own manufacturing or rely on third parties to manufacture products for us, we will face all risks related to the manufacture of therapeutic products for use in medicine including the following risks:

- We or any third-party manufacturers might be unable to timely formulate and manufacture our products or produce the quantity and quality required to meet our clinical and commercial needs, if any.

- We or any third-party manufacturers may not be able to execute our manufacturing procedures appropriately.
- Any third-party manufacturers we engage may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products on a commercial scale.
- We or any third-party manufacturers will be subject to ongoing periodic unannounced inspection by the FDA, and corresponding state agencies to ensure strict compliance with cGMP and other government regulations and corresponding foreign standards. We will not have control over third-party manufacturers' compliance with applicable regulations and standards.
- We may not own, or may have to share, the intellectual property rights to any improvements made by our third-party manufacturers in the manufacturing process for our product candidates.
- Third-party manufacturers could breach or terminate their agreements with us.
- We or third-party manufacturers may experience manufacturing difficulties due to resource constraints or as a result of labor disputes or unstable political environments.

In addition, we may rely on third parties to perform release testing on our product candidates prior to delivery to patients. If these tests are not appropriately conducted and test data are not reliable, patients could be put at risk of serious harm which could result in product liability suits.

If we or any third-party manufacturers that we may engage were to encounter any of these difficulties, our ability to provide our product candidates to patients in clinical trials or to the medical marketplace would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, could require us to either commence new clinical trials at additional expense or terminate clinical trials completely.

The regulatory authorities also may, at any time following approval of a product for sale, audit our manufacturing facilities or those of our third-party contractors. If any such inspection or audit identifies a failure to comply with applicable regulations or if a violation of our product specifications or applicable regulations occurs independent of such an inspection or audit, we or the relevant regulatory authority may require remedial measures that may be costly and/or time-consuming for us or a third party to implement and that may include the temporary or permanent suspension of a clinical study or commercial sales or the temporary or permanent closure of a facility. Any such remedial measures imposed upon us or third parties with whom we contract could materially harm our business.

Additionally, if supply from one approved manufacturer is interrupted, there could be a significant disruption in commercial supply. The regulatory agencies may also require additional studies if a new manufacturer is relied upon for commercial production. Switching manufacturers may involve substantial costs and is likely to result in a delay in our desired clinical and commercial timelines.

Further, our product candidates are manufactured by starting with established master cell banks of human embryonic cells and other cells that are cryopreserved. We will be required to expand the numbers of the pluripotent stem cell master cell banks for future use, as well as produce working cell banks from which the product will be manufactured for clinical trials, produce the relevant product under cGMP conditions, expand the number of relevant cells and cryopreserve them under cGMP conditions. We may not be able to expand the numbers of the pluripotent stem cell master cell banks to provide sufficient cells for clinical trial or for commercial scale production. We may not be able to manufacture product that meets release criteria due to sterility, identity or potency issues. We may not have access or be able to make the reagents necessary to manufacture the cells and we may not have access to adequate supply channels to transport and distribute the products. There are also risks that the cells may be destroyed by interruption in their cryopreservation by means of natural disasters such as earthquakes, power outages, or other unexpected events, or the cells may be determined to be unacceptable as a source of human cellular therapies for reasons we cannot envision. We cannot assure you that any stability or other issues relating to the manufacture of any of our product candidates or products will not occur in the future. If any of our master cell banks are lost or destroyed, including due to systems failure in the cryopreservation processes, our planned clinical trials would be severely delayed, and we would incur significant costs associated with obtaining new supply of cell banks. Accordingly, failures or difficulties faced at any level of our supply chain could adversely affect our business and delay or impede the development and commercialization of any of our product candidates or products and could have an adverse effect on our business, prospects, financial condition and results of operations.

Any therapies that we may develop may compete with other product candidates and products for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing cell-based products for us. Any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing approval.

Each of these risks could delay our clinical trials, any approval of our product candidates by the FDA, or the commercialization of our product candidates, and could result in higher costs or deprive us of potential product revenue.

Any cell-based products that receive regulatory approval may be difficult and expensive to manufacture on a commercial scale.

Pluripotent stem cell and progenitor cell derived therapeutic cells have only been produced on a small scale and not in quantities and at levels of purity and viability that will be needed for wide scale commercialization. If we are successful in developing products that consist of cells or compounds derived from pluripotent stem cells or progenitor cells, we will need to develop facilities, processes, and technology for the commercial production of those products. Pluripotent stem cell or progenitor cell based products are likely to be more expensive to manufacture on a commercial scale than most other drugs on the market today. The high cost of manufacturing a product will require that we charge our customers a high price for the product in order to cover our costs and earn a profit. If the price of our products is too high, hospitals and physicians may be reluctant to purchase our products and we may not be able to sell our products in sufficient volumes to recover our costs or to earn a profit.

If we fail to meet our obligations under license agreements, we may lose our rights to key technologies on which our business depends.

Our business will depend on several critical technologies that we have licensed or sublicensed from Lineage or certain Lineage subsidiaries. The license and sublicense agreements impose obligations on us, including payment obligations and obligations to pursue development and commercialization of products and technologies under the licensed patents or technology. If the licensor or sublicensor believes that we have failed to meet our obligations under a license or sublicense agreement, they could seek to limit or terminate our license rights, which could lead to costly and time-consuming litigation and, potentially, our loss of the licensed rights. During the period of any such litigation our ability to carry out the development and commercialization of potential new products or technologies, and our ability to raise any capital that we might then need, could be significantly and negatively affected. If our license rights were restricted or ultimately lost, we would not be able to continue to use the licensed or sublicensed technology in our business.

Our future success depends on our ability to retain our key personnel and to attract, retain and motivate qualified personnel.

Our industry has experienced a high rate of turnover of management personnel in recent years. We are highly dependent on the development, regulatory, commercialization and business development expertise of Michael D. West, Ph.D., our Chief Executive Officer, as well as the other principal members of our management. Although we have employment agreements with our executive officers, these agreements do not prevent them from terminating their employment with us at any time. In addition, because we will rely on Juvenescence to provide the services of certain administrative and management personnel, we will not have the benefit of the full time and effort of those Juvenescence employees in the management and development of our business.

If we lose one or more of our executive officers or key employees, our ability to implement our business strategy successfully could be seriously harmed. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to develop, gain regulatory approval of and commercialize product candidates successfully. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these additional key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also will experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we will rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be engaged by entities other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to develop and commercialize product candidates will be limited.

Our business and operations could suffer in the event of system failures.

Despite the implementation of security measures, our internal computer systems and those of our contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters including earthquakes and tsunamis, terrorism, war, and telecommunication and electrical failures. A loss of or damage to our data, a disruption in access to our data, or inappropriate disclosure of confidential or proprietary information, could disrupt our operations, delay or otherwise adversely affect the development of our product candidates, significantly increase our costs, or result in delays in any future regulatory filings we may make.

In addition, our product candidates are manufactured by starting with cells that are stored in a cryopreserved master cell bank. While we believe we have adequate backup should any cell bank be lost in a catastrophic event, it is possible that we or our third-party suppliers and manufacturers could lose multiple cell banks and have our manufacturing severely impacted by the need to replace the cell banks. See “—We will face risks related to the manufacture of medical products for any product candidates that we develop.” We cannot assure you that any stability or other issues relating to the manufacture of any of our product candidates or products will not occur in the future. Any delay or interruption in the supply of clinical trial supplies could delay the completion of planned clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to commence new clinical trials at additional expense or terminate clinical trials completely. Any adverse developments affecting clinical or commercial manufacturing of our product candidates or products may result in shipment delays, inventory shortages, lot failures, product withdrawals or recalls or other interruptions in the supply of our product candidates or products. Accordingly, failures or difficulties faced at any level of our supply chain could adversely affect our business and delay or impede the development and commercialization of any of our product candidates or products and could have an adverse effect on our business, prospects, financial condition and results of operations.

Security breaches and other disruptions could compromise our information and expose us to liability, and could cause our business and reputation to suffer.

In the ordinary course of business, we collect and store sensitive data, including intellectual property, our proprietary business information and that of the licensors and licensees of the patents and other intellectual property we use, and personally identifiable information of employees and consultants. The secure processing, maintenance, and transmission of this information is critical to our operations and business strategy. Despite our security measures, our information technology and infrastructure may be vulnerable to attacks by hackers or breached due to employee error, malfeasance, or other disruptions. Any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost, or stolen. Any such access, disclosure, theft, or other loss of information could result in legal claims or proceedings or liability under laws that protect the privacy of personal information, and could disrupt our operations and damage our reputation. Even if we do not incur an interruption of or our operations, fines, penalties, or financial liability to third parties from a security breach, we could suffer a loss of confidence in our services, which could adversely affect our business and competitive position.

Failure of our internal control over financial reporting could harm our business and financial results.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting for external purposes in accordance with U.S. GAAP. Internal control over financial reporting includes maintaining records that in reasonable detail accurately and fairly reflect our transactions; providing reasonable assurance that transactions are recorded as necessary for preparation of our consolidated financial statements; providing reasonable assurance that receipts and expenditures of our assets are made in accordance with management authorization; and providing reasonable assurance that unauthorized acquisition, use, or disposition of our assets that could have a material effect on the consolidated financial statements would be prevented or detected on a timely basis. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our consolidated financial statements would be prevented or detected. Because we are an emerging growth company and a smaller reporting issuer, we are exempt from the requirement of having our internal controls over financial reporting audited by our independent registered public accountants, which means that material weaknesses or significant deficiencies in our internal controls that might be detected by an audit may not be detected and remedied. If we are successful in developing new medical products and technologies, the commercialization of those products and technologies will place significant additional pressure on our system of internal control over financial reporting. Any failure to maintain an effective system of internal control over financial reporting could limit our ability to report our financial results accurately and timely or to detect and prevent fraud. Our accounting and other management systems and resources may not be adequately prepared to meet the financial reporting and other requirements to which we will be subject, and failure to achieve and maintain effective internal controls could have a material adverse effect on our business.

The ongoing COVID-19 global pandemic and the worldwide attempts to contain it could harm our business and our results of operations and financial condition could be adversely impacted by such pandemic.

The global outbreak of the coronavirus COVID-19, and the various attempts throughout the world to contain it, have created significant volatility, uncertainty and disruption. In response to government directives and guidelines, health care advisories and employee and other concerns, we have altered certain aspects of our operations. A number of our employees have had to work remotely from home and those on site have had to follow our social distance guidelines, which could impact their productivity. COVID-19 could also disrupt our operations due to absenteeism by infected or ill members of management or other employees, or absenteeism by members of management and other employees who cannot effectively work remotely but who elect not to come to work due to the illness affecting others in our office or laboratory facilities, or due to quarantines. COVID-19 illness could also impact members of our Board of Directors resulting in absenteeism from meetings of the directors or committees of directors, and making it more difficult to convene the quorums of the full Board of Directors or its committees needed to conduct meetings for the management of our affairs.

Additionally, the anticipated economic consequences of the COVID-19 pandemic have adversely impacted financial markets, resulting in high share price volatility and substantial declines in the market prices of the securities of some publicly traded companies. Volatile or declining markets for equities could adversely affect our ability to raise capital when needed through the sale of shares of common stock or other securities. Accordingly, we cannot assure that adequate financing will be available on favorable terms, if at all. If we are not able to raise the capital we need, we could be forced to modify, curtail, delay, or suspend some or all aspects of planned operations. Sales of additional equity securities could result in significant dilution of the interests of our shareholders.

The full extent to which the COVID-19 pandemic and the various responses might impact our business, operations and financial results will depend on numerous evolving factors that we will not be able to accurately predict, including: the duration and scope of the pandemic; governmental, business and individuals' actions that have been and continue to be taken in response to the pandemic; and the availability and cost to access COVID-19 tests, vaccines and therapies. Due to the uncertain scope and duration of the COVID-19 pandemic and uncertain timing of any recovery or normalization, we are currently unable to estimate the resulting impacts on our operations and financial results. We will continue to actively monitor the issues raised by the COVID-19 pandemic and may take further actions that alter our operations, as may be required by federal, state, local or foreign authorities, or that we determine are in the best interests of our employees, any customers and stockholders. It is not clear what the potential effects any such alterations or modifications may have on our business, including the effects on our financial results.

We are subject to laws and regulations governing corruption, which will require us to develop, maintain, and implement costly compliance programs.

We must comply with a wide range of laws and regulations to prevent corruption, bribery, and other unethical business practices, including the Foreign Corrupt Practices Act or FCPA, anti-bribery and anti-corruption laws in other countries. The creation and implementation of international business practices compliance programs is costly and such programs are difficult to enforce, particularly where reliance on third parties is required.

Anti-bribery laws prohibit us, our employees, and some of our agents or representatives from offering or providing any personal benefit to covered government officials to influence their performance of their duties or induce them to serve interests other than the missions of the public organizations in which they serve. Certain commercial bribery rules also prohibit offering or providing any personal benefit to employees and representatives of commercial companies to influence their performance of their duties or induce them to serve interests other than their employers. The FCPA also obligates companies whose securities are listed in the U.S. to comply with certain accounting provisions requiring us to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and devise and maintain an adequate system of internal accounting controls for international operations. The anti-bribery provisions of the FCPA are enforced primarily by the United States Department of Justice. The SEC is involved with enforcement of the books and records provisions of the FCPA.

Compliance with these anti-bribery laws is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the anti-bribery laws present particular challenges in the medical industry because in many countries including China, hospitals are state-owned or operated by the government, and doctors and other hospital employees are considered foreign government officials. Furthermore, in certain countries (China in particular), hospitals and clinics are permitted to sell pharmaceuticals to their patients and are primary or significant distributors of pharmaceuticals. Certain payments to hospitals in connection with clinical studies, procurement of pharmaceuticals and other work have been deemed to be improper payments to government officials that have led to vigorous anti-bribery law enforcement actions and heavy fines in multiple jurisdictions, particularly in the U.S. and China.

It is not always possible to identify and deter violations, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations.

In the medical industry, corrupt practices include, among others, acceptance of kickbacks, bribes or other illegal gains or benefits by the hospitals and medical practitioners from manufacturers of pharmaceutical or other products, distributors or their third party agents in connection with the prescription of certain pharmaceuticals or sale of products. If our employees, affiliates, distributors or third party marketing firms violate these laws or otherwise engage in illegal practices with respect to their sales or marketing of our products or other activities involving our products, we could be required to pay damages or heavy fines by multiple jurisdictions where we operate, which could materially and adversely affect our financial condition and results of operations. There have been recent occurrences in which certain hospitals have denied access to sales representatives from pharmaceutical companies because the hospitals wanted to avoid the perception of corruption. If this attitude becomes widespread among our potential customers, our ability to promote our products to hospitals may be adversely affected.

If we and our subsidiaries expand operations internationally, we will need to increase the scope of our compliance programs to address the risks relating to the potential for violations of the FCPA and other anti-bribery and anti-corruption laws. Our compliance programs will need to include policies addressing not only the FCPA, but also the provisions of a variety of anti-bribery and anti-corruption laws in multiple foreign jurisdictions, provisions relating to books and records that apply to us as a public company, and include effective training for our personnel throughout our organization. The creation and implementation of anti-corruption compliance programs is costly and such programs are difficult to enforce, particularly where reliance on third parties is required. Violation of the FCPA and other anti-corruption laws can result in significant administrative and criminal penalties for us and our employees, including substantial fines, suspension or debarment from government contracting, prison sentences, or even the death penalty in extremely serious cases in certain countries. The SEC also may suspend or bar us from trading securities on U.S. exchanges for violation of the FCPA's accounting provisions. Even if we are not ultimately punished by government authorities, the costs of investigation and review, distraction of our personnel, legal defense costs, and harm to our reputation could be substantial and could limit our profitability or our ability to develop or commercialize our product candidates. In addition, if any of our competitors are not subject to the FCPA, they may engage in practices that will lead to their receipt of preferential treatment from foreign hospitals and enable them to secure business from foreign hospitals in ways that are unavailable to us.

Risks Related to Our Industry

We face significant competition in an environment of rapid technological change and the possibility that our competitors may achieve regulatory approval before us or develop therapies that are more advanced or effective than ours, which may harm our business and financial condition, and our ability to successfully market or commercialize our product candidates.

The biotechnology and pharmaceutical industries are characterized by rapidly changing technologies, competition and a strong emphasis on intellectual property. We may face competition from other companies focused on therapeutics for age-related disease, which is a highly competitive environment. There are numerous biotechnology companies developing therapeutics for human aging, with each company often focusing on a specific molecular pathway within cells. For example, ResTORbio, Inc. is developing modulators of the mechanistic target of rapamycin (mTOR) pathway to treat immunological and cardiovascular disorders. Calico Life Sciences LLC is a Google-founded research and development company aimed at identifying molecular pathways that control animal lifespan and translating these insights into novel therapeutics designed to increase human healthspan. Unity Biotechnology, Inc. focuses on cellular senescence, in particular, the use of agents that can target senescent cells for selective ablation (senolysis). Unity's stated targeted age-related diseases include osteoarthritis as well as other ophthalmological and pulmonary diseases. Our therapeutic products in development are likely to face competition from a large number of companies and technological strategies including therapeutics intended to address our lead indications. See "Business – Competition."

We may also face competition from large and specialty pharmaceutical and biotechnology companies, academic research institutions, government agencies and public and private research institutions. Many of our current or potential competitors, either alone or with their collaboration partners, have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical, biotechnology, and gene therapy industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient, or are less expensive than any products that we may develop or that would render any products that we may develop obsolete or non-competitive. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. In particular, the Ministry of Labor Health and Welfare in Japan may grant SAKIGAKE designation to a competing product candidate, which is designed to provide for faster review and approval for any such product candidate as compared to the conventional process. If any competing product candidate receives SAKIGAKE designation in Japan, it may be commercialized more quickly in Japan than any of our product candidates. Additionally, technologies developed by our competitors may render our potential product candidates uneconomic or obsolete, and we may not be successful in marketing any product candidates we may develop against competitors.

Any product candidates for which we intend to seek approval as biologic products may face competition sooner than anticipated.

The ACA includes a subtitle called the Biologics Price Competition and Innovation Act of 2009, or BPCIA, which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing the sponsor's own pre-clinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their product. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty. While it is uncertain when such processes intended to implement BPCIA may be fully adopted by the FDA, any such processes could have a material adverse effect on the future commercial prospects for our biological products.

There is a risk that any of our product candidates approved as a biological product under a BLA would not qualify for the 12-year period of exclusivity or that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our product candidates to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

The regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed.

The time required to obtain approval by the FDA and comparable foreign authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. We have not obtained regulatory approval for any product candidate and it is possible that any other product candidates we may seek to develop in the future will ever obtain regulatory approval. Neither we nor any future collaborator or licensee is permitted to market any of our product candidates in the United States until we receive regulatory approval of a biologic license application, or BLA, from the FDA. It is possible that the FDA may refuse to accept for substantive review any BLAs that we submit for our product candidates or may conclude after review of our data that our application is insufficient to obtain marketing approval of our product candidates.

Prior to obtaining approval to commercialize a product candidate in the United States or abroad, we or our collaborators or licensees will need to demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the FDA or foreign regulatory agencies, that the product candidate is safe and effective for the intended uses. Results from nonclinical studies and clinical trials can be interpreted in different ways. Even if we believe the nonclinical or clinical data for our product candidates are promising, such data may not be sufficient to support approval by the FDA and other regulatory authorities. The FDA may also require us to conduct additional preclinical studies or clinical trials for our product candidates either prior to or post-approval, or it may object to elements of our clinical development program. Depending on the extent of these or any other FDA-required studies, approval of any BLA or application that we submit may be delayed by several years or may require us to expend significantly more resources than we have available.

Any therapeutic products that we and our subsidiaries may develop cannot be sold until the FDA and corresponding foreign regulatory authorities approve the products for medical use. The need to obtain regulatory approval to market a new product means that:

- Expensive and time-consuming clinical trials of new products will need to be conducted. The full cost of conducting and completing clinical trials necessary to obtain FDA and foreign regulatory approval of a new product cannot be presently determined but could exceed our financial resources or could discourage any future licensees or collaborators from pursuing FDA approval of our product candidates.
- Clinical trials and the regulatory approval process for a pharmaceutical or cell-based product can take several years to complete. As a result, we will face expenses and delays inherent in seeking FDA and foreign regulatory approval of new products, even if the results of clinical trials are favorable.
- Data obtained from preclinical and clinical studies is susceptible to varying interpretations and regulatory changes that could delay, limit, or prevent regulatory agency approvals.
- Because the therapeutic products we plan to develop with pluripotent stem cell technology or progenitor cell technology involve the application of new technologies and approaches to medicine, the FDA or foreign regulatory agencies may subject those products to additional or more stringent review than drugs or biologicals derived from other technologies.
- A product that is approved may be subject to restrictions on use.
- The FDA can recall or withdraw approval of a product, if it deems necessary.
- We will face similar regulatory issues in foreign countries.

Approval of our product candidates may be delayed or refused for many reasons, including the following:

- The FDA or comparable foreign regulatory authorities may disagree with the design or implementation of the applicable clinical trial;
- A clinical trial might not demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that our product candidates are safe and effective for any of their proposed indications;
- The results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- A clinical trial fail to demonstrate that our product candidates' clinical and other benefits outweigh their safety risks;
- The FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical programs or clinical trials;

- The data collected from clinical trials of our product candidates may not be sufficient to support the submission of a BLA or other comparable submission in foreign jurisdictions or to obtain regulatory approval in the United States or elsewhere;
- The facilities of the any third-party manufacturers with which we may contract may not be adequate to support approval of our product candidates (for example, regulatory approval of cell- and tissue-based products require high standards of quality control); and
- The approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

Of the large number of potential products in development, only a small percentage successfully complete the FDA or foreign regulatory approval processes and are commercialized. The lengthy approval process as well as the unpredictability of future clinical trial results may result in our failing to obtain regulatory approval to market our product candidates, which would significantly harm our business, results of operations and prospects.

Ethical, social and legal concerns about research regarding stem cells, could result in regulations restricting or prohibiting the processes we may use. Federal and state agencies, congressional committees and foreign governments have expressed interest in further regulating biotechnology. More restrictive regulations or claims that our products are unsafe or pose a hazard could prevent us from commercializing any products. New government requirements may be established that could delay or prevent regulatory approval of our product candidates under development. It is impossible to predict whether legislative changes will be enacted, regulations, policies or guidance changed, or interpretations by agencies or courts changed, or what the impact of such changes, if any, may be.

Regulatory requirements governing gene and cell therapy products have changed frequently and may continue to change in the future. The FDA has established the Office of Tissues and Advanced Therapies within its Center for Biologics Evaluation and Research, or CBER, to consolidate the review of gene therapy and related products, and has established the Cellular, Tissue and Gene Therapies Advisory Committee to advise the CBER in its review. Gene therapy clinical trials conducted at institutions that receive funding for recombinant DNA research from the NIH, also are potentially subject to review by the NIH Office of Science Policy's Recombinant DNA Advisory Committee, or the RAC, in limited circumstances. Although the FDA decides whether individual gene therapy protocols may proceed, the RAC public review process, if undertaken, can delay the initiation of a clinical trial, even if the FDA has reviewed the trial design and details and authorized its initiation. Conversely, the FDA can put an investigational new drug application, or IND, on clinical hold even if the RAC has provided a favorable review or an exemption from in-depth, public review. If we were to engage an NIH-funded institution to conduct a clinical trial, that institution's institutional biosafety committee, or IBC, as well as its institutional review board, or IRB, would need to review the proposed clinical trial to assess the safety of the trial and may determine that RAC review is needed. In addition, adverse developments in clinical trials of gene therapy products conducted by others may cause the FDA or other oversight bodies to change the requirements for approval of any of our product candidates. Similarly, foreign regulatory authorities may issue new guidelines concerning the development and marketing authorization for gene therapy medicinal products and require that we comply with these new guidelines.

Some of our future products may be viewed by the FDA as combination products and the review of combination products is often more complex and more time consuming than the review of other types of products.

Our future products may be regulated by the FDA as combination products. For a combination product, the FDA must determine which center or centers within the FDA will review the product candidate and under what legal authority the product candidate will be reviewed. The process of obtaining FDA marketing clearance or approval is lengthy, expensive, and uncertain, and we cannot be sure that any of our combination products, or any other products, will be cleared or approved in a timely fashion, or at all. In addition, the review of combination products is often more complex and more time consuming than the review of a product candidate under the jurisdiction of only one center within the FDA. We cannot be sure that the FDA will not select to have our combination products reviewed and regulated by only one FDA center and/or different legal authority, in which case the path to regulatory approval would be different and could be more lengthy and costly. If the FDA does not approve or clear our products in a timely fashion, or at all, our business and financial condition will be adversely affected.

If we encounter difficulties enrolling patients in clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the study until its conclusion. We may encounter delays in enrolling, or be unable to enroll, a sufficient number of patients to complete any of clinical trials of our product candidates, and even once enrolled we may be unable to retain a sufficient number of patients to complete the trials. The enrollment of patients depends on many factors, including:\

- the patient eligibility criteria defined in the protocol;
- the size of the patient population required for analysis of the trial's primary endpoints;

- the proximity of patients to study sites;
- the design of the trial;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including any new products that may be approved for the indications we are investigating;
- our ability to obtain and maintain patient consents; and
- the risk that patients enrolled in clinical trials will drop out of the trials before completion.

In addition, clinical trials of our product candidates will compete with other clinical trials for product candidates of other companies that are in the same therapeutic areas as our product candidates, and this competition will reduce the number and types of patients available to us, because some patients who might have opted to enroll in trials of our product candidates may instead opt to enroll in a trial being conducted by one of our competitors. Since the number of qualified clinical investigators is limited, we expect that clinical trials of our product candidates may be conducted at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials in such clinical trial site.

Delays or failures in planned patient enrollment or retention may result in increased costs, program delays or both, which could have a harmful effect on our ability to develop our product candidates or could render further development impossible.

Even if we obtain FDA approval for any of our product candidates in the United States, we may never obtain approval for or commercialize it in any other jurisdiction, which would limit our ability to realize its full market potential.

In order to market any products in any particular jurisdiction, we or a licensee or collaborator will need to establish and comply with numerous and varying regulatory requirements on a country-by-country basis regarding safety and efficacy. Approval by the FDA in the United States does not ensure approval by regulatory authorities in other countries or jurisdictions. However, the failure to obtain approval in one jurisdiction may negatively impact our ability to obtain approval elsewhere. In addition, clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not guarantee regulatory approval in any other country.

Approval processes vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking foreign regulatory approval could result in difficulties and increased costs for us and require additional preclinical studies or clinical trials which could be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our products in those countries. We do not have any product candidates approved for sale in any jurisdiction, including in international markets, and we do not have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, or if regulatory approvals in international markets are delayed, our target market will be reduced and our ability to realize the full market potential of any product we develop will be unrealized.

Clinical studies are costly, time consuming and inherently risky, and we may fail to demonstrate safety and efficacy to the satisfaction of applicable regulatory authorities.

Clinical development is expensive, time consuming and involves significant risk. We cannot guarantee that any clinical studies will be conducted as planned or completed on schedule, if at all. A failure of one or more clinical studies can occur at any stage of development. Events that may prevent successful or timely completion of clinical development include but are not limited to:

- inability to generate satisfactory preclinical, toxicology, or other *in vivo* or *in vitro* data to support the initiation or continuation of clinical studies necessary for product approval;
- delays in reaching agreement on acceptable terms with clinical research organizations or CROs and clinical study sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical study sites;
- delays in obtaining required Institutional Review Board, or IRB, approval at each clinical study site;
- failure to permit the conduct of a study by regulatory authorities, after review of an investigational new drug, or IND, or equivalent foreign application or amendment;

- delays in recruiting qualified patients in our clinical studies;
- failure by clinical sites or our CROs or other third parties to adhere to clinical study requirements or report complete findings;
- failure to perform the clinical studies in accordance with the FDA's good clinical practices requirements, or applicable foreign regulatory guidelines;
- patients dropping out of our clinical studies;
- occurrence of adverse events associated with our product candidates;
- inability to use clinical trial results from foreign jurisdictions in support of U.S. regulatory approval;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;
- the cost of clinical studies of our product candidates;
- negative or inconclusive results from our clinical trials which may result in our deciding, or regulators requiring us, to conduct additional clinical studies or abandon development programs for a product candidate; and
- delays in reaching agreement on acceptable terms with third-party manufacturers, or delays in the manufacture of sufficient quantities of our product candidates for use in clinical studies.

Any inability to successfully complete clinical development and obtain regulatory approval could result in additional costs to us or impair our ability to generate revenue. Clinical study delays could also shorten any periods during which our products have patent protection and may allow competitors to develop and bring products to market before we do and may harm our business and results of operations.

Even if a product candidate receives regulatory approval, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense, and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our product candidates.

Any product candidate for that receives marketing approval, along with the manufacturing processes, post-approval clinical data, labeling, packaging, distribution, adverse event reporting, storage, recordkeeping, export, import, advertising and promotional activities for such product, among other things, will be subject to extensive and ongoing requirements of and review by the FDA and other regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, establishment registration and drug listing requirements, continued compliance with cGMP requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians and recordkeeping and Good Clinical Practice, or GCP, requirements for any clinical trials that we conduct post-approval.

The FDA closely regulates the post-approval marketing and promotion of genetic medicines to ensure they are marketed only for the approved indications and in accordance with the provisions of the approved labeling. The FDA imposes stringent restrictions on manufacturers' communications regarding off-label use and if we market our products for uses beyond their approved indications, we may be subject to enforcement action for off-label marketing. Violations of the U.S. federal Food, Drug, and Cosmetic Act, or FDCA, relating to the promotion of prescription drugs may lead to FDA enforcement actions and investigations alleging violations of federal and state health care fraud and abuse laws, as well as state consumer protection laws.

In addition, later discovery of previously unknown adverse events or other problems with our products, manufacturers or manufacturing processes, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may yield various results, including:

- restrictions on manufacturing such products;
- restrictions on the labeling or marketing of a product;
- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning letters or holds on clinical trials;

- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- fines, restitution or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;
- refusal to permit the import or export of our products;
- product seizure or detention; or
- injunctions or the imposition of civil or criminal penalties.

The FDA's policies may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of any of our product candidates. For example, in December 2016, the 21st Century Cures Act, or Cures Act, was signed into law. The Cures Act, among other things, is intended to modernize the regulation of drugs and biologics and spur innovation, but its ultimate implementation is unclear. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained which would adversely affect our business, prospects and ability to achieve or sustain profitability. We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad.

Our product candidates may cause serious adverse events or undesirable side effects or have other properties which may delay or prevent their regulatory approval, limit the commercial profile of an approved label, or, result in significant negative consequences following marketing approval, if any.

Serious adverse events or undesirable side effects caused by our product candidates could cause an interruption, delay or halt of clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign authorities. Results of clinical trials could reveal a high and unacceptable severity and prevalence of side effects, toxicities or unexpected characteristics, including death.

For example, there have been significant adverse side effects in cell therapy treatments in the past, including reported cases of certain cancers. In addition to side effects that may be caused by our product candidates, the conditioning, administration process or related procedures also can cause adverse side effects, including compromise of a patient's immune system. If unacceptable side effects arise in the development of our product candidates, we, the FDA, the IRBs at the institutions in which our studies are conducted or Data Safety Monitoring Board, or DSMB, could suspend or terminate our clinical trials or the FDA or comparable foreign regulatory authorities could order us to cease clinical trials or deny approval of our product candidates for any or all targeted indications. Treatment-related side effects could also affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. In addition, these side effects may not be appropriately recognized or managed by the treating medical staff. We expect to have to train medical personnel using our product candidates to understand the side effect profiles for our clinical trials and upon any commercialization of any of our product candidates. Inadequate training in recognizing or managing the potential side effects of our product candidates could result in patient injury or death. Any of these occurrences may harm our business, financial condition and prospects significantly.

If any of our product candidates receives marketing approval, and we or others later identify undesirable side effects caused by any such product, including during any long-term follow-up observation period recommended or required for patients who receive treatment using our products, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw approvals of such product;
- we may be required to recall a product or change the way such product is administered to patients;
- additional restrictions may be imposed on the marketing of the particular product or the manufacturing processes for the product;
- regulatory authorities may require additional warnings on the label, such as a "black box" warning or contraindication;
- we may be required to implement a Risk Evaluation and Mitigation Strategy, or REMS, or create a medication guide outlining the risks of such side effects for distribution to patients;

- the product could become less competitive;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and could significantly harm our business, results of operations and prospects.

We face potential product liability, and, if successful claims are brought against us, we may incur substantial liability and costs. If the use or misuse of our product candidates harm patients or is perceived to harm patients even when such harm is unrelated to our product candidates, our regulatory approvals could be revoked or could otherwise be negatively impacted, and we could be subject to costly and damaging product liability claims.

The use or misuse of any product candidates in clinical trials and the sale of any products for which we obtain marketing approval exposes us to the risk of product liability claims. Product liability claims might be brought against us by consumers, healthcare providers, pharmaceutical companies, or others selling or otherwise coming into contact with our products. There is a risk that our product candidates may induce adverse events. If we cannot successfully defend against product liability claims, we could incur substantial liability and costs. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- impairment of our business reputation;
- initiation of investigations by regulators;
- withdrawal of clinical trial participants;
- costs due to related litigation;
- distraction of management's attention from our primary business;
- substantial monetary awards to patients or other claimants;
- the inability to commercialize our product candidates;
- product recalls, withdrawals or labeling, and marketing or promotional restrictions;
- loss of revenue; and
- decreased demand for our product candidates, if approved for commercial sale.

We may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. If and when we commence clinical trials or obtain marketing approval for any product candidates, we intend to increase our insurance coverage to include clinical use or the sale of commercial products, as applicable; however, we may be unable to obtain product liability insurance on commercially reasonable terms or in adequate amounts. On occasion, large judgments have been awarded in class action lawsuits based on drugs or medical treatments that had unanticipated adverse effects. A successful product liability claim or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could adversely affect our results of operations and business.

Our insurance policies are expensive and protect us only from some business risks, which leaves us exposed to significant uninsured liabilities.

We do not carry insurance for all categories of risk that our business may encounter. Some of the policies we currently maintain include general liability, employment practices liability, property, auto, workers' compensation, umbrella, and directors' and officers' insurance.

Any additional product liability insurance coverage we acquire in the future, may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. If we obtain marketing approval for any of our product candidates, we intend to acquire insurance coverage to include the sale of commercial products; however, we may be unable to obtain product liability insurance on commercially reasonable terms or in adequate amounts. A successful product liability claim or series of claims brought against us could cause our share price to decline and, if judgments exceed our insurance coverage, could adversely affect our results of operations and business, including preventing or limiting the commercialization of any product candidates we develop.

As a public company, it can be difficult and expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified people to serve on our Board of Directors, our board committees or as executive officers. We do not know, however, if we will be able to maintain existing insurance with adequate levels of coverage. Any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our cash position and results of operations.

Our employees and independent contractors, including principal investigators, CROs, consultants, vendors, and any third parties we may engage in connection with development and commercialization may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could have a material adverse effect on our business.

Misconduct by our employees and independent contractors, including principal investigators, contract research organizations, or CROs, consultants, vendors, and any third parties we may engage in connection with development and commercialization, could include intentional, reckless or negligent conduct or unauthorized activities that violate: (i) the laws and regulations of the FDA, EMA rules and regulations and other similar regulatory requirements, including those laws that require the reporting of true, complete and accurate information to such authorities; (ii) manufacturing standards; (iii) data privacy, security, fraud and abuse and other healthcare laws and regulations; or (iv) laws that require the reporting of true, complete and accurate financial information and data. Specifically, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Activities subject to these laws could also involve the improper use or misrepresentation of information obtained in the course of clinical trials, creation of fraudulent data in pre-clinical studies or clinical trials or illegal misappropriation of drug product, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with such laws or regulations. Additionally, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, disgorgements, possible exclusion from participation in Medicare, Medicaid, other U.S. federal healthcare programs or healthcare programs in other jurisdictions, individual imprisonment, other sanctions, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations.

Government-imposed bans or restrictions and religious, moral, and ethical concerns about the use of human embryonic stem cells could prevent us from developing and successfully marketing stem cell products.

Government-imposed bans or restrictions on the use of embryos or human embryonic stem cells (“hES cells”), in research and development in the United States and abroad could generally constrain stem cell research, thereby limiting the market and demand for our products.

California law requires that stem cell research be conducted under the oversight of a SCRO Committee. Many kinds of stem cell research, including the derivation of new hES cell lines, may only be conducted in California with the prior written approval of the SCRO Committee. A SCRO Committee could prohibit or impose restrictions on the research that we plan to do. An adverse decision by a SCRO Committee, or their imposition of restrictions on a research program could adversely affect our ability to enter into co-development or licensing arrangements for the development of a product candidate.

The use of hES cells may give rise to religious, moral, and ethical issues. These considerations could lead to more restrictive government regulations or could generally constrain stem cell research, thereby limiting the market and demand for our products.

Adverse publicity regarding cell-based therapies could impact our business.

Adverse publicity due to the ethical and social controversies surrounding the use of embryonic stem cells or any adverse reported side effects from any stem cell or other cell therapy clinical trials or to the failure of such trials to demonstrate that these therapies are efficacious could materially and adversely affect our ability to raise capital, conduct and complete clinical trials and achieve market acceptance of such products, if approved. For example, research institutions, including those who may be our collaborators, may from time to time publish findings or studies regarding the human genome (such as the Human Genome Project) that adversely implicate our product candidates, including findings of cancer dependencies in cell lines used in our cell-based therapies.

The price and sale of any product candidates that be marketed may be limited by health insurance coverage and government regulation.

Success in selling our pharmaceutical and cell-based products and medical devices may depend in part on the extent to which health insurance companies, HMOs, and government health administration authorities such as Medicare and Medicaid will pay for the cost of the products and related treatment. Until a new product is introduced into the medical marketplace, we will not know with certainty whether adequate health insurance, HMO, and government coverage will be available to permit the product to be sold at a price high enough for us to generate a profit. In some foreign countries, pricing or profitability of health care products is subject to government control, which may result in low prices for our products. In the United States, there have been a number of federal and state proposals to implement similar government controls, and new proposals are likely to be made in the future. We cannot be sure that coverage and reimbursement in the United States, the EU or elsewhere will be available for our product candidates or any product that we may develop, and any reimbursement that may become available may be decreased or eliminated in the future.

Third-party payors increasingly are challenging prices charged for pharmaceutical products and services, and many third-party payors may refuse to provide coverage and reimbursement for particular drugs or biologics when an equivalent generic drug, biosimilar or a less expensive therapy is available. It is possible that a third-party payor may consider our product candidates as substitutable and only offer to reimburse patients for the less expensive product. Even if we show improved efficacy or improved convenience of administration with our product candidates, pricing of existing third-party therapeutics may limit the amount we will be able to charge for our product candidates. These payors may deny or revoke the reimbursement status of a given product or establish prices for new or existing marketed products at levels that are too low to enable us to realize an appropriate return on our investment in our product candidates. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize our product candidates and may not be able to obtain a satisfactory financial return on our product candidates.

There is significant uncertainty related to the insurance coverage and reimbursement of newly-approved products. In the United States, third-party payors, including private and governmental payors, such as the Medicare and Medicaid programs, play an important role in determining the extent to which new drugs and biologics will be covered. The Medicare and Medicaid programs increasingly are used as models in the United States for how private payors and other governmental payors develop their coverage and reimbursement policies for drugs and biologics. Some third-party payors may require pre-approval of coverage for new or innovative devices or drug therapies before they will reimburse healthcare providers who use such therapies. We cannot predict at this time what third-party payors will decide with respect to the coverage and reimbursement for our product candidates.

No uniform policy for coverage and reimbursement for products exists among third-party payors in the United States. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our product candidates to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. Furthermore, rules and regulations regarding reimbursement change frequently, in some cases on short notice, and we believe that changes in these rules and regulations are likely.

Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost-containment initiatives in Europe and other countries have and will continue to put pressure on the pricing and usage of our product candidates. In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. Other countries allow companies to fix their own prices for medical products but monitor and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our product candidates. Accordingly, in markets outside the United States, the reimbursement for our product candidates may be reduced compared with the United States and may be insufficient to generate commercially-reasonable revenue and profits.

Moreover, increasing efforts by governmental and third-party payors in the United States and abroad to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for newly approved products and, as a result, they may not cover or provide adequate payment for our product candidates. While it is not possible to predict or model the insurance landscape at the time any of our product candidates may receive regulatory approval, we expect to experience pricing pressures in connection with the sale of our product candidates due to the trend toward managed health care, the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs and biologics and surgical procedures and other treatments, has become intense. As a result, increasingly high barriers are being erected to the entry of new products.

Enacted and future healthcare legislation, including the ACA, may increase the difficulty and cost for to obtain marketing approval of and commercialize our product candidates and may affect the prices we may set.

In the United States, the EU and other jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes and proposed changes to the healthcare system that could affect our future results of operations. As a result of the adoption of the ACA in the United States, substantial changes have been made to the system for paying for healthcare in the United States. Certain provisions related to cost-savings and reimbursement measures could adversely affect our future financial performance. For example, among the provisions of the ACA, those of greatest importance to the biopharmaceutical industry includes the following:

- an annual, non-deductible fee payable by any entity that manufactures or imports certain branded prescription drugs and biologic agents (other than those designated as orphan drugs), which is apportioned among these entities according to their market share in certain government healthcare programs;

- new requirements to report certain financial arrangements with physicians and teaching hospitals, including reporting “transfers of value” made or distributed to prescribers and other healthcare providers and reporting investment interests held by physicians and their immediate family members;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer’s Medicaid rebate liability;
- a licensure framework for follow on biologic products;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and
- establishment of a Center for Medicare Innovation at the Centers for Medicare & Medicaid Services, or CMS, to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

The ACA has been subject to revision and to judicial, congressional, and executive challenges. As a result of tax reform legislation passed in December 2017, the requirement that all individuals maintain health insurance coverage or pay a penalty, referred to as the “individual mandate” was eliminated effective January 1, 2019. According to the Congressional Budget Office, the repeal of the individual mandate will cause 13 million fewer Americans to be insured in 2027 and premiums in insurance markets may rise. A challenge to validity of the ACA on constitutional grounds is currently pending before the Supreme Court.

The costs of prescription pharmaceuticals in the United States have also been the subject of considerable debate, and new legislative and administrative measures could be implemented to address such costs. To date, there have been several recent U.S. congressional inquiries and proposed state and federal legislation designed to, among other things, improve transparency in drug pricing, review the relationship between pricing and manufacturer patient programs, reduce the costs of drugs under Medicare, and reform government program reimbursement methodologies for drug products. The pricing of prescription pharmaceuticals is also subject to governmental control outside the United States. In these other countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost effectiveness of our product candidates to other available therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our ability to generate revenues and become profitable could be impaired.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for approved products. In addition, there have been several recent Congressional inquiries and proposed bills designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, reduce the cost of drugs under Medicare and reform government program reimbursement methodologies for drugs. We cannot be sure whether additional legislative changes will be enacted, or whether the FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates, if any, may be. In addition, increased scrutiny by the U.S. Congress of the FDA’s approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent labeling and post-marketing testing and other requirements.

Moreover, payment methodologies may be subject to changes in healthcare legislation and regulatory initiatives. For example, CMS may develop new payment and delivery models, such as bundled payment models. In addition, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products. We expect that additional U.S. federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that the U.S. federal government will pay for healthcare products and services, which could result in reduced demand for our product candidates or additional pricing pressures.

Individual states in the United States have also become increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. Legally-mandated price controls on payment amounts by third-party payors or other restrictions could harm our business, results of operations, financial condition and prospects. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other healthcare programs. This could reduce the ultimate demand for our product candidates or put pressure on our product pricing.

In the EU, similar political, economic and regulatory developments may affect our ability to profitably commercialize our product candidates, if approved. In addition to continuing pressure on prices and cost containment measures, legislative developments at the EU or member state level may result in significant additional requirements or obstacles that may increase our operating costs. The delivery of healthcare in the EU, including the establishment and operation of health services and the pricing and reimbursement of medicines, is almost exclusively a matter for national, rather than EU, law and policy. National governments and health service providers have different priorities and approaches to the delivery of health care and the pricing and reimbursement of products in that context. In general, however, the healthcare budgetary constraints in most EU member states have resulted in restrictions on the pricing and reimbursement of medicines by relevant health service providers. Coupled with ever-increasing EU and national regulatory burdens on those wishing to develop and market products, this could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to commercialize our product candidates, if approved.

In markets outside of the United States and EU, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action in the United States, the EU or any other jurisdiction. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

If we fail to comply with the extensive legal and regulatory requirements affecting the health care industry, we could face increased costs, penalties and a loss of business.

Our activities, and the activities of any collaborators, distributors and other third-party providers that we may engage in the future, will be subject to extensive government regulation and oversight both in the U.S. and in foreign jurisdictions. The FDA and comparable agencies in other jurisdictions will directly regulate many of our most critical business activities, including the conduct of preclinical and clinical studies, product manufacturing, advertising and promotion, product distribution, adverse event reporting, and product risk management. Our interactions in the U.S. or abroad with physicians and other health care providers that prescribe or purchase our products will also be subject to government regulation designed to prevent fraud and abuse in the sale and use of the products and place greater restrictions on the marketing practices of health care companies. Health care companies such as ours are facing heightened scrutiny of their relationships with health care providers from anti-corruption enforcement officials. In addition, health care companies such as ours have been the target of lawsuits and investigations alleging violations of government regulation, including claims asserting submission of incorrect pricing information, impermissible off-label promotion of pharmaceutical products, payments intended to influence the referral of health care business, submission of false claims for government reimbursement, antitrust violations, and violations related to environmental matters. Risks relating to compliance with laws and regulations may be heightened if we operate globally.

Regulations governing the health care industry are subject to change, with possibly retroactive effect, including:

- new laws, regulations or judicial decisions, or new interpretations of existing laws, regulations or decisions, related to health care availability, pricing or marketing practices, compliance with wage and hour laws and other employment practices, method of delivery, payment for health care products and services, compliance with health information and data privacy and security laws and regulations, tracking and reporting payments and other transfers of value made to physicians and teaching hospitals, extensive anti-bribery and anti-corruption prohibitions, product serialization and labeling requirements and used product take-back requirements;
- changes in the FDA and foreign regulatory approval processes that may delay or prevent the approval of new products and result in lost market opportunity;
- requirements that provide for increased transparency of clinical trial results and quality data, such as the EMA's clinical transparency policy, which could impact our ability to protect trade secrets and competitively-sensitive information contained in approval applications or could be misinterpreted leading to reputational damage, misperception, or legal action which could harm our business; and
- changes in FDA and foreign regulations that may require additional safety monitoring, labeling changes, restrictions on product distribution or use, or other measures after the introduction of our products to market, which could increase our costs of doing business, adversely affect the future permitted uses of approved products, or otherwise adversely affect the market for our products.

Violations of governmental regulation may be punishable by criminal and civil sanctions against us, including fines and civil monetary penalties and exclusion from participation in government programs, including Medicare and Medicaid, as well as sanctions against executives overseeing our business. In addition to penalties for violation of laws and regulations, we could be required to repay amounts we received from government payors or pay additional rebates and interest if we are found to have miscalculated the pricing information we have submitted to the government. We cannot ensure that our compliance controls, policies and procedures will in every instance protect us from acts committed by our employees, collaborators, partners or third-party providers that would violate the laws or regulations of the jurisdictions in which we operate. Whether or not we have complied with the law, an investigation into alleged unlawful conduct could increase our expenses, damage our reputation, divert management time and attention, and adversely affect our business.

We may be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, and health information privacy and security laws, and if we are unable to comply with such laws, we could face substantial penalties.

If the FDA grants marketing approval for any of our product candidates or technologies and commercializing those products or technologies begins in the United States, our operations may be subject to various federal and state fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute, the federal False Claims Act, and physician sunshine laws and regulations. These laws may impact, among other things, product sales, marketing, and education programs. In addition, we may be subject to patient privacy regulation by both the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce, or in return for, the purchase or recommendation of an item or service reimbursable under a federal healthcare program, such as the Medicare and Medicaid programs;
- federal civil and criminal false claims laws and civil monetary penalty laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created new federal criminal statutes that prohibit executing a scheme to defraud any healthcare benefit program and making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology and Clinical Health Act, or HITECH, and implementing regulations, which impose certain requirements relating to the privacy, security, and transmission of individually identifiable health information;
- the Physician Payments Sunshine Act which requires manufacturers of drugs, devices, biologics, and medical supplies to report annually to the U.S. Department of Health and Human Services information related to payments and other transfers of value to physicians, other healthcare providers, and teaching hospitals, and ownership and investment interests held by physicians and other healthcare providers and their immediate family members and applicable group purchasing organizations;
- the FDCA, which prohibits, among other things, the adulteration or misbranding of drugs, biologics and medical devices;
- the U.S. Public Health Service Act, which prohibits, among other things, the introduction into interstate commerce of a biological product unless a biologics license is in effect for that product; and
- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws that may apply to items or services reimbursed by any third-party payors, including commercial insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, or that otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state laws governing the privacy and security of health information in certain circumstances.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could be subject to challenge under one or more of such laws. In addition, recent health care reform legislation has strengthened these laws. Further, state laws differ from each other and from federal law in significant ways, thus complicating compliance efforts.

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from participation in government health care programs, such as Medicare and Medicaid, imprisonment, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Risks Related to our Dependence on Third Parties

We may become dependent on future collaborations to develop and commercialize our product candidates and to provide the regulatory compliance, sales, marketing, and distribution capabilities required for the success of our business.

We may enter into various kinds of collaborative research and development and product marketing agreements to develop and commercialize our products. The expected future milestone payments and cost reimbursements from collaboration agreements could provide an important source of financing for our research and development programs, thereby facilitating the application of our technology to the development and commercialization of our products, but there are risks associated with entering into collaboration arrangements.

The process of establishing and maintaining collaborative relationships is difficult, time-consuming and involves significant uncertainty, such as:

- a collaboration partner may shift its priorities and resources away from our product candidates due to a change in business strategies, or a merger, acquisition, sale or downsizing;
- a collaboration partner may seek to renegotiate or terminate their relationships with us due to unsatisfactory clinical results, manufacturing issues, a change in business strategy, a change of control or other reasons;
- a collaboration partner may cease development in therapeutic areas which are the subject of our strategic collaboration;
- a collaboration partner may not devote sufficient capital or resources towards our product candidates;
- a collaboration partner may change the success criteria for a product candidate thereby delaying or ceasing development of such candidate;
- a significant delay in initiation of certain development activities by a collaboration partner will also delay payment of milestones tied to such activities, thereby impacting our ability to fund our own activities;
- a collaboration partner could develop a product that competes, either directly or indirectly, with our product candidate;
- a collaboration partner with commercialization obligations may not commit sufficient financial or human resources to the marketing, distribution or sale of a product;
- a collaboration partner with manufacturing responsibilities may encounter regulatory, resource or quality issues and be unable to meet demand requirements;
- a collaboration partner may terminate a strategic alliance;
- a dispute may arise between us and a partner concerning the research, development or commercialization of a product candidate resulting in a delay in milestones, royalty payments or termination of an alliance and possibly resulting in costly litigation or arbitration which may divert management attention and resources; and
- a partner may use our products or technology in such a way as to invite litigation from a third party.

There is a risk that a collaboration partner might fail to perform its obligations under the collaborative arrangements or may be slow in performing its obligations. In addition, a collaboration partner may experience financial difficulties at any time that could prevent it from having available funds to contribute to the collaboration. If a collaboration partner fails to conduct its product development, commercialization, regulatory compliance, sales and marketing or distribution activities successfully and in a timely manner, or if it terminates or materially modifies its agreements with us, the development and commercialization of one or more product candidates could be delayed, curtailed, or terminated because we may not have sufficient financial resources or capabilities to continue such development and commercialization on our own.

We have no marketing, sales, or distribution resources for the commercialization of any products or technologies that we might successfully develop.

We do not have any infrastructure for the sales, marketing or distribution of our products, and the cost of establishing and maintaining such an organization may exceed the cost-effectiveness of doing so. There are significant expenses and risks involved with establishing our own sales, marketing and distribution capabilities, including our ability to hire, retain and appropriately incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel, and effectively manage a geographically dispersed sales and marketing team. Any failure or delay in the development of our internal sales, marketing and distribution capabilities could delay any product launch, which would adversely impact the commercialization of any approved product candidate.

If we market products through arrangements with third parties, we may pay sales commissions to sales representatives or we may sell or consign products to distributors at wholesale prices. As a result, our gross profit from product sales may be lower than it would be if we were to sell our products directly to end users at retail prices through our own sales force. There can be no assurance we will be able to negotiate distribution or sales agreements with third parties on favorable terms to justify our investment in our products or achieve sufficient revenues to support our operations.

If we are unable to build our own sales force or negotiate a collaborative relationship for the commercialization of our product candidates, we may be forced to delay the potential commercialization of such candidates or reduce the scope of our sales or marketing activities for them. If we elect to increase our expenditures to fund commercialization activities ourselves, we will need to obtain additional capital, which may not be available to us on acceptable terms, or at all. We could enter into arrangements with collaborative partners at an earlier stage than otherwise would be ideal and we may be required to relinquish rights to our product candidates or otherwise agree to terms unfavorable to us, any of which may have an adverse effect on our business, operating results and prospects.

If we are unable to establish adequate sales, marketing and distribution capabilities, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates and may not become profitable and may incur significant additional losses. We will be competing with many companies that currently have extensive and well-funded marketing and sales operations. Without an internal team or the support of a third party to perform marketing and sales functions, we may be unable to compete successfully against these more established companies.

We do not have the ability to independently conduct clinical trials required to obtain regulatory approvals for our product candidates and intend to rely on third parties to conduct, supervise and monitor our clinical trials.

We will need to rely on third parties, such as contract research organizations, data management companies, contract clinical research associates, medical institutions, clinical investigators and contract laboratories to conduct any clinical trials that we may undertake for our product candidates. We may also rely on third parties to assist with our preclinical development of product candidates.

If we outsource clinical trials, we may be unable to directly control the timing, conduct and expense of our clinical trials. However, we will remain responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards and our reliance on the CROs does not relieve us of our regulatory responsibilities.

We and our third-party contractors will be required to comply with the GLPs and GCPs, which are regulations and guidelines enforced by the FDA and are also required by the Competent Authorities of the Member States of the European Economic Area and comparable foreign regulatory authorities in the form of International Conference on Harmonization guidelines for any of our product candidates that are in preclinical and clinical development. The Regulatory authorities enforce GCPs through periodic inspections of trial sponsors, principal investigators and clinical trial sites. If we or our third-party contractors fail to comply with GCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with GCP regulations. In addition, our clinical trials must be conducted with product produced under cGMP regulations. Accordingly, if our third-party contractors fail to comply with these regulations or fail to recruit a sufficient number of subjects, we may be required to repeat clinical trials, which would delay the regulatory approval process.

Our third-party contractors will not be our employees, and we will not control whether or not they devote sufficient time and resources to our future clinical and nonclinical programs. These third-party contractors may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials, or other product development activities which could harm our competitive position. We face the risk of potential unauthorized disclosure or misappropriation of our intellectual property by third-party contractors, which may reduce our trade secret protection and allow our potential competitors to access and exploit our proprietary technology. If our third-party contractors do not successfully carry out their contractual duties or obligations, fail to meet expected deadlines, or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for any other reasons, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval for, or successfully commercialize any product candidate that we develop. As a result, our financial results and the commercial prospects for any product candidate that we develop would be harmed, our costs could increase, and our ability to generate revenues could be delayed.

If our relationship with any third-party contractors terminates, we may not be able to enter into arrangements with alternative third-party contractors or do so on commercially reasonable terms. Switching or adding additional third-party contractors involves substantial cost and requires management time and focus. In addition, there is a natural transition period when a new third party commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we intend to carefully manage our relationships with our third-party contractors, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have an adverse impact on our business, financial condition and prospects.

Risks Related to Intellectual Property

If we are unable to obtain and enforce patents and to protect our trade secrets, others could use our technology to compete with us, which could limit opportunities for us to generate revenues by licensing our technology and selling our products.

- Our success will depend in part on our ability to obtain and enforce patents and maintain trade secrets in the United States and in other countries. If we are unsuccessful in obtaining and enforcing patents, our competitors could use our technology and create products or technologies that compete with our products and technologies, without paying license fees or royalties to us.
- The preparation, filing, and prosecution of patent applications can be costly and time consuming. Our limited financial resources may not permit us to pursue patent protection of all of our technology and products throughout the world.
- Even if we are able to obtain issued patents covering our technology or products, we may have to incur substantial legal fees and other expenses to enforce our patent rights in order to protect our technology and products from infringing uses. We may not have the financial resources to finance the litigation required to preserve our patent and trade secret rights.

There is no certainty that our pending or future patent applications will result in the issuance of patents.

We acquired rights to patent applications for technology that Lineage has developed, and we may file additional new patent applications in the future seeking patent protection for new technology or products that we develop ourselves or jointly with others. However, there is no assurance that any of our licensed patent applications, or any patent applications that we may file in the future in the United States or abroad, will result in the issuance of patents.

The process of applying for and obtaining patents can be expensive and slow.

- The preparation and filing of patent applications, and the maintenance of patents that are issued, may require substantial time and money.
- A patent interference proceeding may be instituted with the U.S. Patent and Trademark Office (the “USPTO”) when more than one person files a patent application covering the same technology, or if someone wishes to challenge the validity of an issued patent. At the completion of the interference proceeding, the USPTO will determine which competing applicant is entitled to the patent, or whether an issued patent is valid. Patent interference proceedings are complex, highly contested legal proceedings, and the USPTO’s decision is subject to appeal. This means that if an interference proceeding arises with respect to any of our patent applications, we may experience significant expenses and delay in obtaining a patent, and if the outcome of the proceeding is unfavorable to us, the patent could be issued to a competitor rather than to us.
- A derivation proceeding may be instituted by the USPTO or an inventor alleging that a patent or application was derived from the work of another inventor.
- Post Grant Review under the new America Invents Act will make available opposition-like proceedings in the United States. As with the USPTO interference proceedings, Post Grant Review proceedings will be very expensive to contest and can result in significant delays in obtaining patent protection or can result in a denial of a patent application.
- Oppositions to the issuance of patents may be filed under European patent law and the patent laws of certain other countries. As with USPTO interference proceedings, these foreign proceedings can be very expensive to contest and can result in significant delays in obtaining a patent or can result in a denial of a patent application.

Intellectual property we may develop using grants received from the federal government are subject to rights maintained by the government.

Research and development we perform that is funded by grants from the federal government, and any intellectual property that we create using those grants, is subject to the rights maintained by the federal government.

Our patents may not protect our technologies or products from competition.

- We might not be able to obtain any patents beyond those we already own or have licensed or sublicensed, and any patents that we do obtain might not be comprehensive enough to provide us with meaningful patent protection.
- There will always be a risk that our competitors might be able to successfully challenge the validity or enforceability of any patent issued to us.
- In addition to interference proceedings, the USPTO can reexamine issued patents at the request of a third party. Our patents may be subject to inter partes review (replacing the reexamination proceeding), a proceeding in which a third party can challenge the validity of one of our patents to have the patent invalidated. This means that patents owned or licensed by us may be subject to reexamination and may be lost if the outcome of the reexamination is unfavorable to us.
- The patents to which we have licenses to, including the licenses to HyStem are broadly licensed to other companies and in some instances, in overlapping fields of use. Asterias Biotherapeutics, Inc. (“Asterias”), a wholly-owned subsidiary of Lineage, has a non-exclusive license to HyStem patents in certain fields of use that overlap with the AgeX sublicensed fields of use. Asterias and AgeX may create competing products. In addition, AgeX, through our subsidiary ReCyte Therapeutics, is a sublicensee under a cross-license between Lineage and Asterias, which creates another potential risk of Asterias and AgeX creating competing products.



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

Filing, prosecuting and defending patents, if issued, on our technology and product candidates in all countries throughout the world would be prohibitively expensive. The requirements for patentability may differ in certain countries, particularly in developing countries. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we may obtain patent protection, but where patent enforcement is not as strong as that in the United States. The products offered by foreign competitors may compete with our products in jurisdictions where we do not have any issued or licensed patents or where any future patent claims or other intellectual property rights may not be effective or sufficient to prevent them from competing with us.

Moreover, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws. Additionally, laws of some countries outside of the United States and Europe do not afford intellectual property protection to the same extent as the laws of the United States and Europe. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of some countries, including India, China and certain developing countries, do not favor the enforcement of patents and other intellectual property rights. This could make it difficult for us to stop the infringement of our patents or the misappropriation of our other intellectual property rights. For example, many foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties. Consequently, we may not be able to prevent third parties from practicing our inventions in certain countries outside the United States and Europe. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection, if our ability to enforce our patents to stop infringing activities is inadequate. These products may compete with our products, and our patents, if issued, or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and resources from other aspects of our business. Furthermore, while we intend to protect our intellectual property rights in major markets, we cannot ensure that we will be able to initiate or maintain similar efforts in all jurisdictions in which we may wish to market products or license our patented technologies. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate.

We may be subject to patent infringement claims that could be costly to defend, which may limit our ability to use disputed technologies, and which could prevent us from pursuing research and development or commercialization of some of our technologies or products, require us to pay licensing fees to have freedom to operate and/or result in monetary damages or other liability for us.

The success of our business depends significantly on our ability to operate without infringing patents and other proprietary rights of others. If the technology that we use infringes a patent held by others, we could be sued for monetary damages by the patent holder or its licensee, or we could be prevented from continuing research, development, and commercialization of technologies and products that rely on that technology, unless we are able to obtain a license to use the patent. The cost and availability of a license to a patent cannot be predicted, and the likelihood of obtaining a license at an acceptable cost would be lower if the patent holder or any of its licensees is using the patent to develop or market a technology or product with which our technologies or products would compete. If we could not obtain a necessary license, we would need to develop or obtain rights to alternative technologies, which could prove costly and could cause delays in developing our technologies or products, or we could be forced to discontinue the development or marketing of any technologies and products that were developed using the technology covered by the patent.

Risks Related to Our Relationship with Juvenescence

Our Chief Operating Officer is not a fulltime AgeX employee.

Our Chief Operating Officer is an employee of Juvenescence and is expected to devote 85% of his time to our affairs and the balance of his time to the affairs of Juvenescence and accordingly we may compete with Juvenescence for his time and attention.

Conflicts of interest may arise from our relationship with Juvenescence, which owns a significant percentage of our common stock and is a significant creditor and will be able to substantially influence us and exert control over matters subject to stockholder approval and the election of directors.

As of March 14, 2022, Juvenescence beneficially owned approximately 69.45% of our common stock, as reported in the most recent amendment of their Schedule 13D, which will enable them to substantially influence us and exert control through this ownership position. The Chairman of our Board of Directors is the Chief Executive Officer of Juvenescence. Juvenescence will be able to exert control over or substantially influence elections of directors, approval of our equity incentive plans, amendments to our organizational documents, or approval of any merger, amalgamation, sale of assets or other major corporate transaction. Juvenescence has controlling stakes and minority investments in several other companies engaged in various aspects of the aging industry, which companies may propose collaborations with AgeX. Juvenescence has also loaned AgeX \$16.2 million and may provide additional loans subject to certain conditions under our Secured Note line of credit with them as described in Note 5 to the consolidated financial statements included in this Report. Juvenescence's interests may not always coincide with our corporate interests or the interests of other stockholders, and it may exercise its voting and other rights, including rights as a creditor, in a manner with which other stockholders may not agree or that may not be in the best interests of AgeX or stockholders other than Juvenescence. So long as Juvenescence continues to own a significant amount of our equity and remains a significant creditor, it will continue to be able to strongly influence and effectively control our decisions. While the directors elected by Juvenescence will be obligated to act in accordance with their fiduciary duty, they may have equity or other interests in Juvenescence and, accordingly, their interests may be aligned with Juvenescence's interests, which may not always coincide with our corporate interests or the interests of our other stockholders.

Juvenescence could own a majority of the outstanding shares of AgeX common stock through the conversion of loans made to us or the exercise of Warrants.

The Secured Note and a Secured Convertible Facility Agreement (the “2020 Loan Agreement”) provide that the aggregate principal amount outstanding loans under those loan agreements may be converted, in whole or in part, into shares of AgeX common stock at any time at Juvenescence’s election. The Secured Note contains a “change of control blocker” provision intended to prevent Juvenescence from converting an amount of the outstanding loan balance that would result in Juvenescence holding 50% or more of the outstanding shares of AgeX common stock without approval by the AgeX stockholders. However, AgeX submitted to its stockholders, and AgeX stockholders approved, a proposal to permit Juvenescence to convert loans outstanding under the 2020 Loan Agreement and to exercise Warrants issued in conjunction with the 2020 Loan Agreement even if the conversion or exercise would result in Juvenescence holding 50% or more of the outstanding shares of AgeX common stock. As a result of that stockholder approval, Juvenescence may, through the exercise of certain Warrants that it holds or through the conversion of outstanding 2020 Loan Agreement loans into shares of AgeX common stock, acquire additional shares of AgeX common stock that would increase Juvenescence’s holdings to more than 50% of the outstanding shares of AgeX common stock. The terms of the Secured Note require us to submit to our stockholders at our next annual meeting a proposal to permit Juvenescence to convert Secured Note loans and to exercise the Warrants issued in connection with the Secured Note that would permit Juvenescence to acquire additional shares of AgeX common stock that would result in Juvenescence owning 50% or more of the outstanding shares. As a controlling stockholder, Juvenescence would have the power to elect all directors of AgeX and to approve or reject all matters submitted for stockholder approval by the AgeX Board of Directors, by Juvenescence as a stockholder, or by other stockholders, including but not limited to: equity compensation plans for employees, officers, and directors; mergers, acquisitions, and consolidations; sales of AgeX assets; and amendments of AgeX’s certificate of incorporation and bylaws. Furthermore, upon Juvenescence holding more than 50% the outstanding AgeX common stock, AgeX would qualify as a “controlled company” as defined by the NYSE American Company Guide. Being a “controlled company” would entitle AgeX to exempt itself from the requirement that a majority of its directors be “independent” directors as defined in the NYSE American Company Guide, and that the Compensation Committee and the Nominating & Corporate Governance Committee be comprised entirely of independent directors.

Risks Pertaining to Our Common Stock

There is a limited history to the public trading of our common stock and there is no assurance that a market for our common stock will be sustained.

Public trading of our common stock on the NYSE American began on November 29, 2018. Accordingly, there is only a limited history of the public trading of our common stock and there can be no assurance that an active market for our common stock will be sustained.

We cannot predict the prices at which our common stock may trade. The market price of our common stock may fluctuate significantly, depending upon many factors, some of which may be beyond our control, including, but not limited to:

- a shift in our investor base;
- our quarterly or annual earnings, or those of comparable companies;
- actual or anticipated fluctuations in our operating results;
- our ability to obtain financing as needed;
- changes in laws and regulations affecting our business;
- changes in accounting standards, policies, guidance, interpretations or principles;
- announcements by us or our competitors of significant investments, acquisitions or dispositions;
- the failure of securities analysts to cover our common stock;
- changes in earnings estimates by securities analysts or our ability to meet those estimates;
- the operating performance and stock price of comparable companies;
- overall market fluctuations; and
- general economic conditions and other external factors.

Because we are engaged in the development of pharmaceutical and cell therapy products, the price of shares of our common stock may rise and fall rapidly.

The price of our common stock may rise rapidly in response to certain events, such as the commencement of clinical trials of an experimental new therapy, even though the outcome of those trials and the likelihood of ultimate FDA approval of a therapeutic product remain uncertain. Similarly, prices of our common stock may fall rapidly in response to certain events such as unfavorable results of clinical trials or a delay or failure to obtain FDA approval. Further, the failure of our earnings to meet analysts' expectations could result in a significant rapid decline in the market price of our common stock.

Because we do not pay dividends, our stock may not be a suitable investment for anyone who needs to earn dividend income.

We do not have current plans to pay any cash dividends on our common stock. The declaration, amount and payment of any future dividends on shares of common stock will be at the sole discretion of our Board of Directors. Our Board of Directors may take into account general and economic conditions, our financial condition and results of operations, our available cash and current and anticipated cash needs, capital requirements, contractual, legal, tax and regulatory restrictions and implications on the payment of dividends by us to our stockholders or by our subsidiaries to us and such other factors as our Board of Directors may deem relevant. For the foreseeable future we anticipate that any earnings generated in our business will be used to finance the growth of our business and will not be paid out as dividends to our stockholders. This means that our stock may not be a suitable investment for anyone who needs to earn income from their investments.

Securities analysts may not initiate coverage or continue to cover our common stock, and this may have a negative impact on the market price of our shares.

The market price and liquidity of our common stock will depend, in part, on the research and reports that securities analysts publish about our business and our common stock. We do not have any control over these analysts. There is no guarantee that securities analysts will cover our common stock. If securities analysts do not cover our common stock, the lack of research coverage may adversely affect the market price of those shares. If securities analysts do cover our shares, they could issue reports or recommendations that are unfavorable to the price of our shares, and they could downgrade a previously favorable report or recommendation, and in either case our share price could decline as a result of the report. If one or more of these analysts ceases to cover our shares or fails to publish regular reports on our business, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

You may experience dilution of your ownership interests if we issue additional shares of common stock or preferred stock.

In the future, we may issue our authorized but previously unissued equity securities, resulting in the dilution of the ownership interests of our present stockholders. We are currently authorized to issue an aggregate of 105,000,000 shares of capital stock consisting of 100,000,000 shares of common stock and 5,000,000 "blank check" shares of preferred stock. As of March 14, 2022, there were 37,943,064 shares of common stock issued and outstanding, and 3,439,332 shares of common stock reserved for issuance upon the exercise of outstanding stock options or other stock-based awards under our 2017 Equity Incentive Plan, and 9,051,431 shares of common stock reserved for issuance upon the exercise of outstanding Warrants held by Juvenescence. No shares of preferred stock are presently outstanding.

We will issue additional shares to Juvenescence if Juvenescence elects to exercise its right to convert the principal amount of outstanding loans and loan origination fees under the Secured Note or the 2020 Loan Agreement into shares of our common stock. The number of shares that would be issuable to Juvenescence depends on the market price of our common stock and the amount of loans and origination fees that Juvenescence might elect to convert into common stock. Juvenescence may also acquire shares of AgeX common stock by exercising warrants it holds. We also have the right to convert the loans from Juvenescence into shares of our common stock if we raise new capital in at least certain amounts specified in the Secured Note and 2020 Loan Agreement. See Note 5 to our consolidated financial statements included elsewhere in this Report.

We may issue additional common stock or other securities that are convertible into or exercisable for common stock in order to raise additional capital, or in connection with hiring or retaining employees or consultants, or in connection with future acquisitions of licenses to technology or medical products or for other business purposes. The future issuance of any additional shares of common stock or other securities may create downward pressure on the trading price of our common stock.

We may also issue preferred stock having rights, preferences, and privileges senior to the rights of our common stock with respect to dividends, rights to share in distributions of our assets if we liquidate our company, or voting rights. Any preferred stock may also be convertible into common stock on terms that would be dilutive to holders of common stock.

Our subsidiaries may finance a portion of their operations by selling shares of their capital stock or debt securities convertible into shares of their capital stock to private investors. Sales of subsidiary shares would reduce our ownership interest in the subsidiaries, and correspondingly dilute our shareholder's ownership interests in our consolidated enterprise. Our subsidiaries could also have their own stock option plans and the exercise of subsidiary stock options or the sale of restricted stock under those plans would also reduce our ownership interest in the subsidiaries, with a resulting dilutive effect on the ownership interest of our shareholders in our consolidated enterprise. Subsidiaries might also issue preferred stock having rights, preferences, and privileges senior to the rights of the subsidiary common stock we hold with respect to dividends, rights to share in distributions of our assets if the subsidiary is liquidated, or voting rights. Any subsidiary preferred stock may also be convertible into common stock on terms that would be dilutive to us as a holder of subsidiary common stock.

Unless our common stock continues to be listed on a national securities exchange it will become subject to the so-called "penny stock" rules that impose restrictive sales practice requirements.

On November 17, 2021, we received a letter (the "Deficiency Letter") from the staff of the NYSE American (the "Exchange") indicating that AgeX does not meet certain of the Exchange's continued listing standards as set forth in Section 1003(a)(i) of the Exchange Company Guide in that we have stockholders' equity of less than \$2,000,000 and have incurred losses from continuing operations and/or net losses during our two most recent fiscal years. Pursuant to Section 1009 of the Exchange Company Guide and as provided in the Deficiency Letter provided the Exchange staff with a plan (the "Compliance Plan") advising the Exchange staff of action we have taken and will take that would bring AgeX into compliance with the Exchange's continued listing standards. The Exchange staff has accepted our Compliance Plan. The Exchange staff will review AgeX's compliance with the Compliance Plan on a quarterly basis and if AgeX does not show progress consistent with the Compliance Plan or is not in compliance with the Exchange's continued listing standards by November 17, 2022, subject to such extensions of time as the Exchange, in its discretion may permit, the Exchange will commence delisting procedures. If the Exchange staff determines that AgeX is not in compliance with the Compliance Plan at any time, the Exchange staff will promptly initiate delisting proceedings.

AgeX intends to make arrangements to have its common stock quoted on an electronic interdealer quotation system Electronic interdealer quotation system if its common stock is delisted from the NYSE American.

If we are unable to maintain the listing of our common stock on the Exchange or another national securities exchange, our common stock could become subject to the so-called "penny stock" rules if the shares have a market value of less than \$5.00 per share. The SEC has adopted regulations that define a penny stock to include any stock that has a market price of less than \$5.00 per share, subject to certain exceptions, including an exception for stock traded on a national securities exchange. The SEC regulations impose restrictive sales practice requirements on broker-dealers who sell penny stocks to persons other than established customers and accredited investors. An accredited investor generally is a person whose individual annual income exceeded \$200,000, or whose joint annual income with a spouse exceeded \$300,000 during the past two years and who expects their annual income to exceed the applicable level during the current year, or a person with net worth in excess of \$1.0 million, not including the value of the investor's principal residence and excluding mortgage debt secured by the investor's principal residence up to the estimated fair market value of the home, except that any mortgage debt incurred by the investor within 60 days prior to the date of the transaction shall not be excluded from the determination of the investor's net worth unless the mortgage debt was incurred to acquire the residence. For transactions covered by this rule, the broker-dealer must make a special suitability determination for the purchaser and must have received the purchaser's written consent to the transaction prior to sale. This means that if we are unable maintain the listing of our common stock on a national securities exchange, the ability of stockholders to sell their AgeX common stock in the secondary market could be adversely affected.

If a transaction involving a penny stock is not exempt from the SEC's rule, a broker-dealer must deliver a disclosure schedule relating to the penny stock market to each investor prior to a transaction. The broker-dealer also must disclose the commissions payable to both the broker-dealer and its registered representative, current quotations for the penny stock, and, if the broker-dealer is the sole market-maker, the broker-dealer must disclose this fact and the broker-dealer's presumed control over the market. Finally, monthly statements must be sent disclosing recent price information for the penny stock held in the customer's account and information on the limited market in penny stocks.

We are an “emerging growth company,” and may elect to comply with reduced public company reporting requirements applicable to emerging growth companies, which could make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the JOBS Act, and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not “emerging growth companies” including reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We may take advantage of these reporting exemptions until we are no longer an “emerging growth company.” We will remain an “emerging growth company” until the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1.07 billion or more; (ii) the last day of the fiscal year following the fifth anniversary of the date of the first sale of our common equity securities pursuant to an effective registration statement under the Securities Act; (iii) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a “large accelerated filer” under the Exchange Act.

We could be subject to securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biopharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management’s attention and resources, which could harm our business.

Provisions in our certificate of incorporation and bylaws and under Delaware law could make an acquisition of our company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our certificate of incorporation and our bylaws may discourage, delay or prevent a merger, acquisition or other change in control of our company that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our Board of Directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our Board of Directors. Among other things, these provisions include those establishing:

- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the ability of our Board of Directors to authorize the issuance of shares of preferred stock and to determine the terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer; and
- the ability of our Board of Directors to alter our bylaws without obtaining stockholder approval.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the General Corporation Law of the State of Delaware, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Item 1B. Unresolved Staff Comments

Not Applicable.

Item 2. Properties

Our principal offices are located at 1101 Marina Village Parkway, Suite 201, Alameda, California in 135 square feet of leased space in a building located in an office and research park. Base monthly rent is \$1,074 for the one year lease term of the premises also covers office furniture rental, janitorial services, utilities and internet service.

Item 3. Legal Proceedings

From time to time, we may be involved in routine litigation incidental to the conduct of our business. We are not presently involved in any material litigation or proceedings, and to our knowledge no such litigation or proceedings are contemplated.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities

Our common stock has been traded on the NYSE American under the symbol “AGE” since November 29, 2018.

As of March 1, 2022, we had 232 holders of record of our common stock. This number does not include stockholders whose shares of AgeX common stock are held in “street name” in accounts with securities broker-dealers or other financial institutions or fiduciaries.

The following table shows certain information concerning the stock options outstanding and available for issuance under all of our compensation plans and agreements as of December 31, 2021 (in thousands, except weighted average exercise price):

Plan Category	Number of Shares to be Issued upon Exercise of Outstanding Options, and Rights	Weighted Average Exercise Price of the Outstanding Options, and Rights	Number of Shares Remaining Available for Future Issuance under Equity Compensation Plans
AgeX Stock Option Plans Approved by Stockholders ⁽¹⁾	3,381	\$ 2.32	1,035

(1) This information pertains to our 2017 Equity Incentive Plan. Additional information concerning our 2017 Equity Incentive Plan and the stock options may be found in Note 7 to the Consolidated Financial Statements.

Item 6. Selected Financial Data

Not applicable.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following Management’s Discussion and Analysis of Financial Condition and Results of Operations is intended to provide information necessary to understand our audited consolidated financial statements for the years ended December 31, 2021 and 2020, and highlight certain other information which, in the opinion of management, will enhance a reader’s understanding of our financial condition, changes in financial condition and results of operations. These historical financial statements may not be indicative of our future performance. This Management’s Discussion and Analysis of Financial Condition and Results of Operations contains a number of forward-looking statements, all of which are based on our current expectations and could be affected by the uncertainties and risks described throughout this filing, particularly in “Risk Factors.”

Emerging Growth Company Status

The Jumpstart our Business Startups Act of 2012 (“JOBS Act”) permits an “emerging growth company” such as AgeX to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. However, we elected to comply with newly adopted or revised accounting standards when they become applicable to public companies because our financial statements were consolidated with those of Lineage, which is not an emerging growth company under the JOBS Act and is therefore not permitted to delay the adoption of new or revised accounting standards that become applicable to public companies. This election under the JOBS Act to not delay the adoption of new or revised accounting standards is irrevocable.

Overview

We are a biotechnology company focused on the development and commercialization of novel therapeutics targeting human aging and degenerative diseases. Our initial discovery and preclinical programs focus on utilizing brown adipose tissue in targeting diabetes, obesity, and heart disease; and induced tissue regeneration in utilizing the human body’s own abilities to scarlessly regenerate tissues damaged from age or trauma. We may also pursue other early-stage pre-clinical programs.

Since inception, our operations have focused on building our technology platform, identifying potential product candidates, establishing and protecting our intellectual property and raising capital. Prior to our disposition of LifeMap Sciences during March 2021, our revenues were principally derived from subscription and advertising revenue from LifeMap Sciences’ online databases based upon applicable subscription or advertising periods. We do not have any products approved for sale and have not generated any revenue from product sales.

Since inception, we have incurred significant operating losses and we will need to obtain additional financing in order to continue our operations, including our research and development programs. See “Liquidity and Capital Resources” for a discussion of our available capital resources and our need for financing. Our operating losses from continuing operations were \$8.0 million and \$10.1 million for the years ended December 31, 2021 and 2020, respectively. As of December 31, 2021, we had an accumulated deficit of \$105.7 million. We expect to continue to incur operating losses and negative cash flows for the foreseeable future.

Critical Accounting Policies and Significant Judgements and Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (“US GAAP”), requires management to make estimates and assumptions that affect the reported amounts in our consolidated financial statements and related notes. Our significant accounting policies are described in Note 2 to our consolidated financial statements included elsewhere in this Report. We have identified below our critical accounting policies and estimates that we believe require the greatest amount of judgment. On an ongoing basis, we evaluate our estimates that are subject to significant judgment including those related to going concern assessment of consolidated financial statements, allocations and adjustments necessary for carve-out basis of presentation, including the separate return method for income taxes, useful lives associated with long-lived assets, including evaluation of asset impairment, allowances for uncollectible accounts receivables, loss contingencies, deferred income taxes and tax reserves, including valuation allowances related to deferred income taxes, and assumptions used to value stock-based awards, or other equity instruments. Actual results could differ materially from those estimates. On an ongoing basis, we evaluate our estimates compared to historical experience and trends, which form the basis for making judgments about the carrying value of assets and liabilities. To the extent that there are material differences between our estimates and our actual results, our future consolidated financial statement presentation, financial condition, results of operations and cash flows will be affected.

We believe the assumptions and estimates associated with the following have the greatest potential impact on our consolidated financial statements.

Going concern assessment. We assess going concern uncertainty for our consolidated financial statements to determine if we have sufficient cash and cash equivalents on hand and working capital to operate for a period of at least one year from the date our consolidated financial statements are issued, which is referred to as the “look-forward period” as defined by FASB’s ASU No. 2014-15. As part of this assessment, based on conditions that are known and reasonably knowable to us, we consider various scenarios, forecasts, projections, and estimates, and we make certain key assumptions, including the timing and nature of projected cash expenditures or programs, among other factors, and our ability to delay or curtail those expenditures or programs within the look-forward period in accordance with ASU No. 2014-15, if necessary.

Principles of consolidation. AgeX’s consolidated financial statements include the accounts of its subsidiaries and certain research and development departments. AgeX consolidated its direct and indirect wholly-owned or majority-owned subsidiaries because AgeX has the ability to control their operating and financial decisions and policies through its ownership, and the noncontrolling interest is reflected as a separate element of stockholders’ deficit on AgeX’s consolidated balance sheets.

AgeX’s consolidated balance sheet at December 31, 2020, as reported, includes LifeMap Sciences’ consolidated assets and liabilities, after intercompany eliminations. However, LifeMap Sciences’ consolidated assets and liabilities are not included in AgeX’s consolidated balance sheet at December 31, 2021, due to the deconsolidation of LifeMap Sciences on March 15, 2021. LifeMap Sciences’ consolidated financial statements and consolidated results of operations include its wholly-owned and consolidated subsidiary LifeMap Sciences, Ltd.

AgeX’s consolidated statements of operations for the year ended December 31, 2021 include LifeMap Sciences’ consolidated results for the period through March 15, 2021 rather than the day immediately preceding the deconsolidation due to the conversion of \$1,761,296 of LifeMap Sciences’ indebtedness to AgeX into shares of LifeMap Sciences common stock on March 15, 2021 followed by the completion of the cash-out merger on the same day. For the year ended December 31, 2020, AgeX’s consolidated results include LifeMap Sciences’ consolidated results for the full period presented.

Long-lived intangible assets. Long-lived intangible assets, consisting primarily of acquired patents, acquired in-process research and development (“IPR&D”) with alternative future uses, patent applications, and licenses to use certain patents, are stated at acquired cost, less accumulated amortization. Amortization expense is computed using the straight-line method over the estimated useful lives of the assets, generally over 10 years.

Impairment of long-lived assets. Long-lived assets, including long-lived intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be fully recoverable. If an impairment indicator is present, we evaluate recoverability by a comparison of the carrying amount of the assets to future undiscounted net cash flows expected to be generated by the assets. If the assets are impaired, the impairment recognized is measured by the amount by which the carrying amount exceeds the estimated fair value of the assets. Through December 31, 2021, there have been no such impairment losses.

Accounting for warrants. We determine the accounting classification of warrants we issue, as either liability or equity, by first assessing whether the warrants meet liability classification in accordance with ASC 480-10, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*, then in accordance with ASC 815-40, *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock*. Under ASC 480, warrants are considered liability classified if the warrants are mandatorily redeemable, obligate us to settle the warrants or the underlying shares by paying cash or other assets, and warrants that must or may require settlement by issuing a variable number of shares. If warrants do not meet the liability classification under ASC 480-10, we assess the requirements under ASC 815-40, which states that contracts that require or may require the issuer to settle the contract for cash are liabilities recorded at fair value, irrespective of the likelihood of the transaction occurring that triggers the net cash settlement feature. If the warrants do not require liability classification under ASC 815-40, in order to conclude equity classification, we also assess whether the warrants are indexed to our common stock and whether the warrants are classified as equity under ASC 815-40 or other U.S. GAAP. After all such assessments, we conclude whether the warrants are classified as liability or equity. Liability classified warrants require fair value accounting at issuance and subsequent to initial issuance with all changes in fair value after the issuance date recorded in the statements of operations. Equity classified warrants only require fair value accounting at issuance with no changes recognized subsequent to the issuance date. We do not have any liability classified warrants as of any period presented. See Notes 5 and 10 to our consolidated financial statements included elsewhere in this Report for additional information regarding warrants.

Stock-based compensation. We recognize compensation expense related to employee stock option grants and other equity based awards, if any, in accordance with FASB ASC 718, *Compensation – Stock Compensation* (“ASC 718”).

We use the Black-Scholes option pricing model for estimating the fair value of options granted under our 2017 Equity Incentive Plan (the “Incentive Plan”). The fair value of each restricted stock or restricted stock unit grant, if any, is determined based on the value of the common stock granted or sold. We have elected to treat stock-based awards with time-based service conditions as a single award and recognize stock-based compensation on a straight-line basis over the requisite service period.

Compensation expense for non-employee stock-based awards is recognized in accordance with ASC 718. Stock option awards issued to non-employees, principally consultants or outside contractors, as applicable, are accounted for at fair value using the Black-Scholes option pricing model. Management believes that the fair value of the stock options can more reliably be measured than the fair value of services received. We record compensation expense based on the then-current fair values of the stock options at the grant date in accordance with ASU 2018-07, *Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*, which simplifies the accounting for non-employee share-based payment transactions. We adopted ASU 2018-07 on January 1, 2019. As we had one stock option grant issued to a nonemployee as of the adoption date and one additional stock option grant during 2019 to the same nonemployee, the application of the new standard did not have a material impact on our consolidated financial statements. Compensation expense for non-employee grants is recorded on a straight-line basis in the consolidated statements of operations.

The Black-Scholes option pricing model requires us to make certain assumptions including the fair value of the underlying common stock, the expected term, the expected volatility, the risk-free interest rate and the dividend yield.

The fair value of the shares of common stock underlying the stock options has historically been determined by our Board of Directors. Because there was no public market for our common stock prior to November 29, 2018, our Board of Directors determined the fair value of the common stock at the time of the grant of options prior to that date by considering a number of objective and subjective factors including contemporaneous sales of our common stock to investors, valuation of comparable companies, operating and financial performance and general and industry-specific economic outlook, amongst other factors. The fair value was determined in accordance with applicable elements of the practice aid issued by the American Institute of Certified Public Accountants titled *Valuation of Privately Held Company Equity Securities Issued as Compensation*. Since our common stock began publicly trading on the NYSE American, the fair value of our common stock underlying stock options has been valued based on prevailing market prices.

The expected term of employee stock options represents the weighted-average period that the stock options are expected to remain outstanding. We estimate the expected term of options granted based upon the “simplified method” provided under *Staff Accounting Bulletin, Topic 14*, or SAB Topic 14.

Because our common stock had no publicly traded history prior to November 29, 2018, for the years ended December 31, 2021 and 2020, we estimated the expected volatility using our own stock price volatility to the extent applicable or a combination of our stock price volatility and the stock price volatility of peer companies, for a period equal to the expected term of the options. The peer companies used include selected public companies within the biotechnology industry with comparable characteristics to AgeX, including similarity in size, lines of business, market capitalization, revenue and financial leverage.

The risk-free interest rate assumption is based upon observed interest rates on the United States government securities appropriate for the expected term of our stock options.

The dividend yield assumption is based on our history and expectation of dividend payouts. We have never declared or paid any cash dividends on our common stock, and we do not anticipate paying any cash dividends in the foreseeable future.

All excess tax benefits and tax deficiencies from stock-based compensation awards accounted for under ASC 718 are recognized as an income tax benefit or expense, respectively, in the consolidated statements of operations. An excess income tax benefit arises when the tax deduction of a share-based award for income tax purposes exceeds the compensation cost recognized for financial reporting purposes, and a tax deficiency arises when the compensation cost exceeds the tax deduction.

Stock-based compensation expense for the years ended December 31, 2021 and 2020 consists of stock-based compensation under the Incentive Plan, and stock-based compensation of AgeX's subsidiaries that have their own stock option plans.

Our consolidated subsidiary ReCyte Therapeutics and our former subsidiary LifeMap Sciences had their own share-based compensation plans. For share-based compensation awards granted by those privately-held consolidated subsidiaries under their respective equity plans, we determined the fair value of the options granted under those plans using similar methodologies and assumptions we used for our stock options discussed above. None of our consolidated subsidiaries have granted stock options or other equity awards for the years ended December 31, 2021 or 2020.

Although the fair value of stock options is determined in accordance with FASB guidance, changes in the assumptions and allocations can materially affect the estimated value and therefore the amount of compensation expense recognized in the consolidated financial statements.

Income taxes. For Federal and California purposes, AgeX's activity through August 30, 2018 was included in Lineage's federal consolidated and California combined tax returns. As of December 31, 2021, the deferred tax assets and liabilities presented in Note 8 included elsewhere in this Report, including net operating loss carryforwards and research and development credits, represent the tax attributes of AgeX and its subsidiaries. However, the net operating losses and research and development credits generated before August 18, 2017 with respect to Lineage research departments that were transferred to us on that date will remain as tax attributes of Lineage.

In general, net operating losses and other tax credit carryforwards generated by legal entities in a consolidated federal tax group or a combined state tax group, collectively "the tax group", are available to other members of the tax group depending on the nature of the transaction that a member may enter into while still in the tax group. However, under the Tax Matters Agreement between Lineage and AgeX entered into on August 17, 2017, any use of a member's net operating loss and other tax credit carryforwards by the other member is subject to reimbursement by the benefiting member for the actual tax benefit realized. Since the August 30, 2018 deconsolidation of AgeX and to date, neither Lineage nor AgeX has used the tax attributes of the other.

We account for income taxes in accordance with ASC 740, which prescribes the use of the asset and liability method, whereby deferred tax asset or liability account balances are calculated at the balance sheet date using current tax laws and enacted rates in effect. Valuation allowances are established when necessary to reduce deferred tax assets when it is more likely than not that a portion or all of the deferred tax assets will not be realized. Our judgments, estimates and projections regarding future taxable income may change over time due to changes, among other factors, in market conditions, changes in tax laws, and tax planning strategies. If our assumptions and consequently our estimates change in the future, the valuation allowance may be increased or decreased, which may have a material impact on our consolidated financial statements.

The guidance also prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not sustainable upon examination by taxing authorities. We recognize accrued interest and penalties related to unrecognized tax benefits as income tax expense. No unrecognized tax benefits have been recorded and no amounts were accrued for the payment of interest and penalties as of December 31, 2021 and 2020. We do not expect that the total amount of unrecognized tax benefits will materially change over the next twelve months. We are currently unaware of any tax issues under review.

On December 22, 2017, the United States enacted major federal tax reform legislation, Public Law No. 115-97, commonly referred to as the 2017 Tax Cuts and Jobs Act ("2017 Tax Act"), which enacted a broad range of changes to the Internal Revenue Code. Changes to taxes on corporations impacted by the 2017 Tax Act include, but not limited to, lowering the U.S. federal tax rates to a 21 percent flat tax rate, eliminating the corporate alternative minimum tax ("AMT"), imposing additional limitations on the deductibility of interest and net operating losses, allowing any net operating loss ("NOLs") generated in tax years ending after December 31, 2017 to be carried forward indefinitely and generally repealing carrybacks, reducing the maximum deduction for NOL carryforwards arising in tax years beginning after 2017 to a percentage of the taxpayer's taxable income, and allowing for additional expensing of certain capital expenditures. The 2017 Tax Act also puts into effect a number of changes impacting operations outside of the United States including, but not limited to, the imposition of a one-time tax "deemed repatriation" on accumulated offshore earnings not previously subject to U.S. tax, and shifts the U.S. taxation of multinational corporations from a worldwide system of taxation to a territorial system. ASC 740 requires the effects of changes in tax rates and laws on deferred tax balances (including the effects of the one-time transition tax) to be recognized in the period in which the legislation is enacted. Future guidance from the Internal Revenue Service and other tax authorities may affect certain aspects of the 2017 Tax Act, for example, the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") and the Consolidated Appropriations Act, 2021 ("CAA") modified certain provisions of the 2017 Tax Act. In addition, it is uncertain if and to what extent various states will conform to the 2017 Tax Act, the CARES Act or the CAA.

Revenue recognition. During the first quarter of 2018, we adopted FASB ASU 2014-09, *Revenues from Contracts with Customers (Topic 606)*, which created a single, principle-based revenue recognition model that supersedes and replaces nearly all existing U.S. GAAP revenue recognition guidance. We adopted ASU 2014-09 using the modified retrospective transition method applied to those contracts which were not completed as of the adoption date. Results for reporting periods beginning on January 1, 2018 and thereafter are presented under Topic 606. Our largest source of revenue was subscription and advertising revenues generated by LifeMap Sciences prior to the LifeMap Deconsolidation.

We recognize revenue in a manner that depicts the transfer of control of a product or a service to a customer and reflects the amount of the consideration it expects to receive in exchange for such product or service. In doing so, we follow a five-step approach: (i) identify the contract with a customer, (ii) identify the performance obligations in the contract, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations, and (v) recognize revenue when (or as) the customer obtains control of the product or service. We consider the terms of a contract and all relevant facts and circumstances when applying the revenue recognition standard. We apply the revenue recognition standard, including the use of any practical expedients, consistently to contracts with similar characteristics and in similar circumstances.

In the applicable paragraphs below, we have summarized our revenue recognition policies for various revenue sources in accordance with Topic 606.

Subscription and advertisement revenues. LifeMap Sciences sold subscription-based products, including research databases and software tools, for biomedical, gene, and disease research. LifeMap Sciences sold these subscriptions primarily through the internet to biotech and pharmaceutical companies worldwide. LifeMap Sciences' principal subscription product was the GeneCards[®] Suite, which includes the GeneCards[®] human gene database, and the MalaCards[™] human disease database.

LifeMap Sciences' performance obligations for subscriptions included a license of intellectual property related to its genetic information packages and premium genetic information tools. These licenses were deemed functional licenses that provide customers with a "right to access" to LifeMap Sciences' intellectual property during the subscription period and, accordingly, revenue was recognized over a period of time, which was generally the subscription period. Payments were typically received at the beginning of a subscription period and revenue was recognized according to the type of subscription sold. For subscription contracts in which the subscription term commenced before a payment was due, LifeMap Sciences recorded an account receivable because the subscription was earned over time and billed the customer according to the contract terms. LifeMap Sciences deferred subscription revenues primarily represented subscriptions for which cash payment was received for the subscription term, but the subscription term was not completed as of the balance sheet date reported.

LifeMap Sciences' deferred subscription revenues primarily represent subscriptions for which cash payment was received for the subscription term, but the subscription term was not completed as of the balance sheet date reported. For the year ended December 31, 2020, LifeMap Sciences recognized \$1.3 million in subscription and advertisement revenues. As of December 31, 2021, there was no deferred revenues included in the consolidated balance sheets due to the LifeMap Deconsolidation.

LifeMap Sciences licensed from third parties the databases and software it commercializes and had a contractual obligation to pay royalties to the licensor on subscriptions sold. These costs were included in operating loss from discontinued operations on the consolidated statements of operations when the cash was received and the royalty obligation was incurred, as the royalty payments do not qualify for capitalization of costs to fulfill a contract under ASC 340-40, *Other Assets and Deferred Costs - Contracts with Customers*.

LifeMap Sciences did not generate sufficient revenues to meet its operating expenses. On March 15, 2021, LifeMap Sciences was acquired by a third party in a cash-out merger. See Note 3 to our consolidated financial statements included in this Report.

Grant revenues. AgeX accounts for grants received to perform research and development services in accordance with ASC 730-20, *Research and Development Arrangements*. At the inception of the grant, we perform an assessment as to whether the grant is a liability or a contract to perform research and development services for others. If AgeX or a subsidiary receiving the grant is obligated to repay the grant funds to the grantor regardless of the outcome of the research and development activities, then AgeX is required to estimate and recognize that liability. Alternatively, if AgeX or a subsidiary receiving the grant is not required to repay, or if it is required to repay the grant funds only if the research and development activities are successful, then the grant agreement is accounted for as a contract to perform research and development services for others, in which case, grant revenue is recognized when the related research and development expenses are incurred.

In applying the provisions of Topic 606, we have determined that government grants are out of the scope of Topic 606 because the government entities do not meet the definition of a "customer", as defined by Topic 606, as there is not considered to be a transfer of control of good or services to the government entities funding the grant. In the absence of applicable guidance under U.S. GAAP, our policy is to recognize grant revenue when the related costs are incurred, provided that the applicable conditions under the government contracts have been met. Only costs that are allowable under the grant award, certain government regulations and the National Institutes of Health's supplemental policy and procedure manual may be claimed for reimbursement, and the reimbursements are subject to routine audits from governmental agencies from time to time. Costs incurred are recorded in research and development expenses on the accompanying consolidated statements of operations.

In September 2018, we were awarded a grant of up to approximately \$225,000 from the National Institutes of Health (NIH). The NIH grant provides funding for continued development of our technologies for treating osteoporosis. Grant funds were made available by the NIH as allowable expenses were incurred. For the year ended December 31, 2020, we incurred approximately \$25,000 of allowable expenses under the NIH grant and recognized a corresponding amount of grant revenues. As of March 31, 2020, AgeX expended the full amount available under this grant.

On April 8, 2020, we were awarded a grant of up to approximately \$386,000 from the NIH. The NIH grant provides funding for continued development of AgeX's technologies for treating stroke. The grant funds will be made available by the NIH to AgeX as allowable expenses are incurred. For the year ended December 31, 2021, we incurred approximately \$104,000 of allowable expenses under the NIH grant and recognized a corresponding amount of grant revenues.

Arrangements with multiple performance obligations. Future contracts with customers may include multiple performance obligations. For such arrangements, we will allocate revenue to each performance obligation based on its relative standalone selling price. We generally determine or estimate standalone selling prices based on the prices charged, or that would be charged, to customers for that product or service. As of and for the year ended December 31, 2021, we did not have significant arrangements with multiple performance obligations.

Research and development. Research and development expenses consist primarily of personnel costs and related benefits, including stock-based compensation, amortization of intangible assets, outside consultants and suppliers, and license fees paid to third parties to acquire patents or licenses to use patents and other technology. Research and development expenses incurred and reimbursed by grants from third parties or governmental agencies, including service revenues from co-development projects with customers, if any and as applicable, approximate the respective revenues recognized in the consolidated statements of operations.

General and administrative. General and administrative expenses consist primarily of compensation and related benefits, including stock-based compensation, for executive and corporate personnel, and professional and consulting fees.

Impact of COVID-19 pandemic

The global outbreak of the coronavirus COVID-19, and the various attempts throughout the world to contain it, have created significant volatility, uncertainty and disruption. In response to government directives and guidelines, health care advisories and employee and other concerns, we have altered certain aspects of our operations. A number of our employees have had to work remotely from home and those on site have had to follow our social distance guidelines, which could impact their productivity. COVID-19 could also disrupt our operations due to absenteeism by infected or ill members of management or other employees, or absenteeism by members of management and other employees who cannot effectively work remotely but who elect not to come to work due to the illness affecting others in our office or in the laboratory facilities of third parties undertaking research work for us, or due to quarantines. COVID-19 illness could also impact members of our Board of Directors resulting in absenteeism from meetings of the directors or committees of directors and making it more difficult to convene the quorums of the full Board of Directors or its committees needed to conduct meetings for the management of our affairs.

We have a Sponsored Research Agreement with the University of California at Irvine (UCI) for the derivation of neural stem cells, with the goal of developing cellular therapies to treat neurological disorders and diseases. The pace of work on the research project was slowed by COVID-19 safety procedures, but we expect the initial work to be concluded during 2022.

The full extent to which the COVID-19 pandemic and the various responses might impact our business, operations and financial results will depend on numerous evolving factors that we will not be able to accurately predict, including: the duration and scope of the pandemic; governmental, business and individuals' actions that have been and continue to be taken in response to the pandemic; and the availability, effectiveness, and cost to access COVID-19 tests, vaccines and therapies. Due to the uncertain scope and duration of the COVID-19 pandemic and uncertain timing of any recovery or normalization, we are currently unable to estimate the resulting impacts on our operations and financial results. We will continue to actively monitor the issues raised by the COVID-19 pandemic and may take further actions that alter our operations, as may be required by federal, state, local or foreign authorities, or that we determine are in the best interests of our employees, any customers and stockholders. It is not clear what the potential effects any such alterations or modifications may have on our business, including the effects on our financial results.

Financial Operations Overview

Up until our disposition of LifeMap Sciences, our revenues were principally derived from subscription and advertising revenues from LifeMap Sciences' online databases based upon applicable subscription or advertising periods. LifeMap Sciences was acquired by a third party through a cash-out merger during March 2021 and as a result of that merger transaction we no longer own interest in LifeMap Sciences and will no longer recognize any post-merger revenues attributable to LifeMap Sciences' business. We do not have any therapeutic products approved for sale and have generated insignificant revenues from commercialized product sales, and we do not expect to generate any significant revenues from product sales for the foreseeable future.

Our operating expenses consist of research and development expenses primarily from our pre-clinical programs and general and administrative expenses. As a result of the layoffs of mostly research personnel in April 2020 research and development work have been scaled back and contracted out to third party service providers within the newly imposed budgetary constraints under the 2020 Loan Agreement. Accordingly, the historical amounts of expense presented and discussed in this Report are likely not going to be indicative of expenses during future periods.

Results of Operations

The following comparisons exclude the impact of the operations of LifeMap Sciences which have been presented in our consolidated financial results as discontinued operations. See Note 3 to our consolidated financial statements included in this Report for a discussion of discontinued operations.

Comparison of Years Ended December 31, 2021 and 2020

Revenues and Cost of Sales

The amounts in the table below show our consolidated revenues by source and cost of sales for the years ended December 31, 2021 and 2020 (in thousands).

	Year Ended December 31,		\$ Increase/ (Decrease)	% Increase (Decrease)
	2021	2020		
Grant revenues	\$ 104	\$ 307	\$ (203)	\$ (66.1)%
Other revenues	40	54	(14)	(25.9)%
Total revenues	144	361	(217)	(60.1)%
Cost of sales	(19)	(26)	(7)	(26.9)%
Gross profit	\$ 125	\$ 335	\$ (210)	(62.7)%

During the years ended December 31, 2021 and 2020, we recognized income of approximately \$104,000 and \$307,000, respectively, from grants awarded by the NIH. We expended the full amount available under one of the NIH grants as of March 31, 2020.

Operating Expenses

We have made certain adjustments to our operating plans and budgets to reduce our cash expenditures in order to extend the period over which we can continue our operations with our available cash resources. These adjustments entailed a staff force reduction, primarily research and development personnel effective May 1, 2020. As a result of those staff reductions, we paid approximately \$105,000 in accrued payroll and unused paid time off and other benefits, and we recognized approximately \$194,800 in restructuring charges in connection with the reduction in staffing, consisting of contractual severance.

The following table shows our consolidated operating expenses for the years ended December 31, 2021 and 2020 (in thousands).

	Year Ended December 31,		\$ Increase/ (Decrease)	% Increase/ (Decrease)
	2021	2020		
Research and development expenses	\$ 1,456	\$ 3,714	\$ (2,258)	(60.8)%
General and administrative expenses	6,708	6,721	(13)	(0.2)%

Research and development expenses

Research and development expenses for the year ended December 31, 2021 compared to 2020 have decreased due to scaled down research and development related activities following the layoff of 11 employees in May 2020 and shutdown of our lab facilities as of December 31, 2020, the date on which our office and laboratory lease agreement expired. See Note 9 to our consolidated financial statements included in this Report for a discussion of our lease agreements.

Research and development expenses for the year ended December 31, 2021 decreased by \$2.2 million to \$1.5 million as compared to \$3.7 million in 2020. The net decrease was primarily attributable to decreases of: \$0.8 million in salaries and related costs including non-cash stock-based compensation; \$0.7 million in laboratory facilities and equipment related expenses and maintenance including laboratory supplies; \$0.7 million in depreciation and amortization of laboratory equipment and improvements; and \$0.1 million in scientific consulting, outside research and service expenses. These decreases were offset to some extent by increase of \$0.1 million in patent related professional fees allocable to research and development expenses.

General and administrative expenses

General and administrative expenses for the year ended December 31, 2021 remained consistent with the same period in 2020 at \$6.7 million. Changes in costs included in general and administrative expenses included decreases of \$0.4 million in professional fees for legal services; \$0.3 million in personnel related expenses, including non-cash stock-based compensation expense; \$0.2 million in professional fees for accounting services; and \$0.1 million in travel and lodging expenses. These decreases were offset to some extent by increases of \$0.2 million in patent and license maintenance related fees including annual minimum royalties due under license agreement; \$0.2 million in insurance expenses; \$0.2 million in non-cash stock-based compensation to our independent directors; \$0.1 million in investor relations related expenses; and \$0.3 million in certain facilities related expenses due to termination of shared facilities and services agreements with sublessees and LifeMap Sciences. See notes 3 and 9 to our consolidated financial statements included in this Report for discussion of disposition and deconsolidation of LifeMap Sciences and subleases.

General and administrative expenses include employee and director compensation allocated to general and administrative expenses, consulting fees other than those paid for science-related consulting, facilities and equipment rent and maintenance related expenses, insurance costs allocated to general and administrative expenses, stock exchange-related costs, depreciation expense, marketing costs, legal and accounting costs, and other miscellaneous expenses which are allocated to general and administrative expense.

Other expense, net

Other expense, net in 2021 consists primarily of approximately \$437,000 gain recognized upon forgiveness of our Paycheck Protection Program loan indebtedness ("PPP Loan") on February 19, 2021 offset by amortization of deferred debt costs on loans from Juvenescence. Other expense, net in 2020 consists primarily of \$100,000 proceeds from the sale of intangible assets offset by amortization of deferred debt costs on loans from Juvenescence. See Note 5 to our consolidated financial statements included in this Report for discussion of loan agreements and related debt costs.

Income taxes

Beginning in 2018, the 2017 Tax Act subjects a U.S. stockholder to tax on Global Intangible Low Tax Income "GILTI" earned by certain foreign subsidiaries. In general, GILTI is the excess of a U.S. shareholder's total net foreign income over a deemed return on tangible assets. The provision further allows a deduction of 50% of GILTI, however this deduction is limited to the company's pre-GILTI U.S. income. For the year ended December 31, 2020, AgeX's foreign entity operated at a book loss. However, for GILTI purposes, US tax laws are applied to the foreign activity and as a result there was an immaterial amount included in income for 2020. For the year ended December 31, 2021, AgeX's foreign entity operated at an immaterial loss; therefore, no GILTI was included in income. Current interpretations under ASC 740 state that an entity can make an accounting policy election to either recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years or to provide for the tax expense related to GILTI in the year the tax is incurred as a period expense. We have elected to account for GILTI as a current period expense when incurred.

For the year ended December 31, 2021, we experienced a domestic loss from continuing operations and a foreign loss; therefore, no income tax provision was recorded for the year ended December 31, 2021.

As of December 31, 2021, we had net operating loss carryforwards of approximately \$48.6 million for U.S. federal income tax purposes. In general, NOLs and other tax credit carryforwards generated by legal entities in a consolidated federal tax group are available to other members of the tax group depending on the nature of the transaction that a member may enter into while still in the consolidated federal tax group. However, under the Tax Matters Agreement between Lineage and AgeX, any use of a member's NOLs and other tax credit carryforwards by the other member is subject to reimbursement by the benefiting member for the actual tax benefit realized. Since the August 30, 2018 deconsolidation of AgeX and to date, neither Lineage nor AgeX has used the tax attributes of the other.

As of December 31, 2021, we had net operating losses of approximately \$20.4 million for California purposes. As we and our subsidiaries have been included in the combined California tax return with Lineage, up to the date of deconsolidation on August 30, 2018, those state net operating losses will remain with AgeX.

Federal net operating losses generated on or prior to December 31, 2017, expire in varying amounts between 2028 and 2037, while federal net operating losses generated after December 31, 2017, carryforward indefinitely. The state net operating losses expire in varying amounts between 2028 and 2041.

As of December 31, 2021, we had research and development tax credit carryforwards for federal and state tax purposes of \$0.8 million and \$0.6 million, respectively. The federal tax credits expire between 2028 and 2041, while the state tax credits have no expiration date.

As of December 31, 2021, we had capital loss carryforwards for federal and state tax purposes of \$12.4 million and \$5.9 million, respectively. The federal and California capital loss carryforwards will expire in 2026.

A valuation allowance is provided when it is more likely than not that all or some portion of the deferred tax assets will not be realized. We established a full valuation allowance for all periods presented due to the uncertainty of realizing future tax benefits from its net operating loss carryforwards and other deferred tax assets.

Liquidity and Capital Resources

Operating Losses and Going Concern Considerations

We have incurred operating losses and negative cash flows since inception and had an accumulated deficit of \$105.7 million as of December 31, 2021. We expect to continue to incur operating losses and negative cash flows.

We have made certain adjustments to our operating plans and budgets to reduce our projected cash expenditures in order to extend the period over which we can continue our operations with our available cash resources. These adjustments entailed down-sizing of our leased office space effective January 1, 2021, a staff force reduction during 2020, primarily impacting research and development personnel, and the elimination of our leased laboratory facility, that will require the deferral of certain work on the development of our product candidates and technologies. However, notwithstanding those adjustments, based on our most recent projected cash flows, our cash and cash equivalents and potential additional loans that may become available to us from Juvenescence under the 2022 Secured Note, and the proceeds we may receive from the sale of additional shares of our common stock in “at-the-market” transactions through a Sales Agreement with Chardan Capital Markets, LLC (“Chardan”) as a sales agent, would not be sufficient to satisfy our anticipated operating and other funding requirements for the next twelve months from the date of filing of this Report. These factors raise substantial doubt regarding our ability to continue as a going concern. See Notes 5 and 10 to our consolidated financial statements included elsewhere in this Report for additional information about our loan agreements with Juvenescence. We will need to raise additional capital in the near term to be able to meet our operating expenses.

As of December 31, 2021, we had borrowed a total of \$7.0 million under the 2019 Loan Agreement and \$7.5 million under the 2020 Loan Agreement, and we borrowed the \$0.5 million remaining credit available under the 2020 Loan Agreement during January 2022. The 2022 Secured Note and the 2020 Loan Agreement prohibit us and our subsidiaries ReCyte Therapeutics and Reverse Bio from borrowing funds from other lenders or engaging in certain other transactions without the consent of Juvenescence unless we repay all amounts owed to Juvenescence, except that Reverse Bio may borrow fund through convertible debt and the borrowing restrictions will lapse as to Reverse Bio if it raises more than \$15 million in debt or equity capital by February 14, 2023. AgeX has granted Juvenescence a security interest and lien on substantially all of AgeX’s assets to secure AgeX’s obligations under the Secured Note. These factors and the impact of potential dilution through the issuance of shares of our common stock upon the conversion of the Juvenescence loans into AgeX common stock and the exercise of warrants issued or issuable to Juvenescence in connection with the loans made to us could make AgeX less attractive to new equity investors and could impair our ability to finance our operations or the operations of our subsidiaries unless Juvenescence agrees, in its discretion, to lend us funds.

We may sell up to \$12.1 million of common shares in “at-the-market” transactions through a Sales Agreement with Chardan. We do not have any other committed sources of funds for additional financing.

The availability of financing for AgeX may be adversely impacted by the COVID-19 pandemic which could depress national and international economies and disrupt capital markets, supply chains, and aspects of our operations. The extent to which the ongoing COVID-19 pandemic will ultimately impact our business, results of operations, financial condition, or cash flows is highly uncertain and difficult to predict because it will depend on many factors that are outside our control. The unavailability or inadequacy of financing to meet future capital needs could force us to modify, curtail, delay, or suspend some or all aspects of planned operations.

To the extent that we are able to raise additional capital through the sale of AgeX equity or convertible debt securities or the sale of equity or convertible debt securities of any of our subsidiaries, the ownership interest of our present stockholders will be diluted, and the terms of any securities we or our subsidiaries issue may include liquidation or other preferences that adversely affect the rights of our common stockholders. Additional debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends, and may involve the issuance of convertible debt or stock purchase warrants that would dilute the equity interests of our stockholders. If we raise funds through additional strategic partnerships or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us.

Cash used in operating activities

Continuing operations: During the year ended December 31, 2021, our total research and development expenses were \$1.5 million and our general and administrative expenditures were \$6.7 million. Net loss attributable to us for the year ended December 31, 2021 amounted to \$8.6 million. Net cash used in operating activities from continuing operations during this period amounted to \$7.8 million. The difference between the net loss attributable to us and net cash used in operating activities from continuing operations during the year ended December 31, 2021 was primarily attributable to the following: \$0.9 million payment of financed insurance premium liability; \$0.4 million gain on the forgiveness of PPP Loan indebtedness; and \$0.1 million gain on the LifeMap Deconsolidation (see Note 3 to our consolidated financial statements included elsewhere in this Report). These amounts were offset to some extent by \$1.2 million in amortization of intangible assets and deferred debt issuance costs and \$1.0 million in stock-based compensation expense.

Discontinued operations: Net loss attributable to us for the year ended December 31, 2021 amounted to \$0.1 million. Net cash used in operating activities from discontinued operations during this period amounted to \$0.1 million. The net zero difference between the net loss attributable to us and net cash used in operating activities from discontinued operations during the year ended December 31, 2021 was primarily attributable to decreased amortization expenses by \$0.1 million offset by \$0.1 million as a result of deconsolidation of discontinued operations. See Note 3 to our consolidated financial statements included elsewhere in this Report for additional information regarding the disposition and deconsolidation of LifeMap Sciences.

Cash provided by investing activities

Continuing operations: During the year ended December 31, 2021, net cash provided by investing activities from continuing operations amounted to \$0.7 million, which consisted of \$0.5 million we received in cash as our pro rata share of the Merger Consideration for the disposition of our interest in LifeMap Sciences and the collection of \$250,000 as a partial payment of LifeMap Sciences' indebtedness to us as a pre-requisite to the disposition of our interest in LifeMap Sciences during March 2021.

Discontinued operations: Net cash used in investing activities from discontinued operations of \$50,000 results from the deconsolidation of LifeMap Sciences cash and cash equivalents. See Note 3 to our consolidated financial statements included elsewhere in this Report.

Cash provided by financing activities

Continuing operations: During the year ended December 31, 2021, net cash provided by financing activities from continuing operations amounted to \$7.5 million, which was attributable to the \$2.0 million drawn against the 2020 Loan Agreement entered into with Juvenescence in March 2020 and \$5.0 million drawn against the 2019 Loan Agreement as amended in February and November 2021, and approximately \$0.5 million gross proceeds raised from the sale of AgeX common shares through at-the-market offerings.

Discontinued operations: Net cash used in financing activities from discontinued operations of \$250,000 relates to the partial payment of LifeMap Sciences' indebtedness to us as discussed further above. See Note 3 to our consolidated financial statements included elsewhere in this Report.

Off-Balance Sheet Arrangements

As of December 31, 2021, we did not have any off-balance sheet arrangements, as defined in Item 303(a) (4) (ii) of SEC Regulation S-K.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Not applicable.

Item 8. Financial Statements and Supplementary Data

**AgeX Therapeutics, Inc.
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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors
AgeX Therapeutics, Inc.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheet of AgeX Therapeutics, Inc. and Subsidiaries (collectively, the “Company”) as of December 31, 2021, the related consolidated statements of operations, comprehensive loss, stockholders’ equity (deficit), and cash flows for the year ended December 31, 2021, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021, and the results of its operations and its cash flows for the year ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

The consolidated financial statements of the Company as of and for the year ended December 31, 2020 were audited by OUM & Co. LLP, who joined WithumSmith+Brown, PC on July 15, 2021, and rendered their opinion on such statements on March 31 2021.

The Company’s Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1, the Company has had recurring losses and negative operating cash flows since inception, an accumulated deficit at December 31, 2021, and insufficient cash and cash equivalents and loan proceeds at December 31, 2021 to fund operations for twelve months from the date of issuance. All of these matters raise substantial doubt about the Company’s ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the Audit Committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements; and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Intangible Assets Impairment Assessment – Long-Lived Intangible Assets

Description of the Matter

As described in Note 2 to the consolidated financial statements, the Company’s long-lived net intangible assets, which consisted primarily of patents and acquired in-process research and development, had a balance of \$0.9 million as of December 31, 2021.

Long-lived intangible assets are assessed for impairment whenever events or changes in circumstances indicate the carrying amounts of the assets may not be recoverable. Recoverability of a long-lived intangible asset that will continue to be used in the Company’s operations is measured by comparing the carrying amount of the asset to the forecasted undiscounted future cash flows related to the asset.

Auditing the Company’s impairment analysis of its long-lived intangible assets is complex because of the significant judgment used by management in the identification of events that suggest an asset group may not be recoverable, and the highly subjective assumptions used by management in the impairment testing process.

How We Addressed the Matter in Our Audit

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included, among others, obtaining an understanding of and evaluating management's process for identifying potential impairment events; evaluating the appropriateness of the cash flow model used in the impairment testing process; testing the completeness, accuracy, and relevance of underlying data used in the model; and evaluating the reasonableness of the significant assumptions used by management, including the future cash flow projections. We evaluated the reasonableness of management's assumptions for future cash flow projections in consideration of (i) the current and past performance of the asset group, (ii) the consistency with external market and industry data, and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit.

/s/ WithumSmith+Brown, PC

We have served as the Company's auditor since 2017.

San Francisco, California
March 29, 2022

PCAOB ID Number 100

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Stockholders and Board of Directors
AgeX Therapeutics, Inc.
Alameda, California

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheet of AgeX Therapeutics, Inc. (the “Company”) as of December 31, 2020, the related consolidated statements of operations, comprehensive loss, stockholders’ deficit, and cash flows for the year ended December 31, 2020, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020, and the results of its operations and its cash flows for the year ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Going Concern Uncertainty

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1, the Company has had recurring losses and negative operating cash flows since inception, an accumulated deficit at December 31, 2020, and insufficient cash and cash equivalents and loan proceeds at December 31, 2020 to fund operations for twelve months from the date of issuance. All of these matters raise substantial doubt about the Company’s ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ OUM & CO. LLP

We served as the Company’s auditor since 2017.

San Francisco, California
March 31, 2021

AGEX THERAPEUTICS, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(In thousands, except par value amounts)

	December 31,	
	2021	2020
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	\$ 584	\$ 527
Accounts and grants receivable, net	25	326
Prepaid expenses and other current assets	1,625	1,430
Total current assets	<u>2,234</u>	<u>2,283</u>
Deposit	50	50
Intangible assets, net	870	1,592
TOTAL ASSETS	<u>\$ 3,154</u>	<u>\$ 3,925</u>
LIABILITIES AND STOCKHOLDERS' DEFICIT		
CURRENT LIABILITIES		
Accounts payable and accrued liabilities	\$ 771	\$ 1,656
Loan due to Juvenescence, net of debt issuance cost, current portion	7,140	1,960
Related party payables, net	70	71
Deferred revenues, current portion	-	275
Paycheck Protection Program Loan	-	436
Insurance premium liability and other current liabilities	986	959
Total current liabilities	<u>8,967</u>	<u>5,357</u>
Loan due to Juvenescence, net of debt issuance cost, net of current portion	6,062	3,900
Deferred revenues, net of current portion	-	64
TOTAL LIABILITIES	<u>15,029</u>	<u>9,321</u>
Commitments and contingencies (Note 9)		
STOCKHOLDERS' DEFICIT		
Preferred stock, \$0.0001 par value, authorized 5,000 shares; none issued and outstanding as of December 31, 2021 and 2020	-	-
Common stock, \$0.0001 par value, 100,000 shares authorized; 37,941 and 37,691 shares issued and outstanding as of December 31, 2021 and 2020, respectively	4	4
Additional paid-in capital	93,912	91,810
Accumulated other comprehensive income	-	143
Accumulated deficit	(105,748)	(97,073)
AgeX Therapeutics, Inc. stockholders' deficit	(11,832)	(5,116)
Noncontrolling interest	(43)	(280)
Total stockholders' deficit	<u>(11,875)</u>	<u>(5,396)</u>
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	<u>\$ 3,154</u>	<u>\$ 3,925</u>

See accompanying notes to the consolidated financial statements.

AGEX THERAPEUTICS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data)

	Year Ended December 31,	
	2021	2020
REVENUES:		
Grant revenues	\$ 104	\$ 307
Other revenues	40	54
Total revenues	<u>144</u>	<u>361</u>
Cost of sales	<u>(19)</u>	<u>(26)</u>
Gross profit	<u>125</u>	<u>335</u>
OPERATING EXPENSES:		
Research and development	1,456	3,714
General and administrative	6,708	6,721
Total operating expenses	<u>8,164</u>	<u>10,435</u>
Gain on deconsolidation of LifeMap Sciences (Note 3)	106	-
Loss from operations	<u>(7,933)</u>	<u>(10,100)</u>
OTHER EXPENSE, NET:		
Interest expense, net	(1,097)	(404)
Other income, net	448	105
Total other expense, net	<u>(649)</u>	<u>(299)</u>
NET LOSS FROM CONTINUING OPERATIONS	<u>(8,582)</u>	<u>(10,399)</u>
NET LOSS FROM DISCONTINUED OPERATIONS (Note 3)	<u>(103)</u>	<u>(727)</u>
NET LOSS BEFORE INCOME TAXES	<u>(8,685)</u>	<u>(11,126)</u>
Income tax benefit from discontinued operations	<u>-</u>	<u>150</u>
NET LOSS	<u>(8,685)</u>	<u>(10,976)</u>
Net loss attributable to noncontrolling interest from continuing operations	3	5
Net loss attributable to noncontrolling interest from discontinued operations	<u>7</u>	<u>106</u>
NET LOSS ATTRIBUTABLE TO AGEX	<u>\$ (8,675)</u>	<u>\$ (10,865)</u>
NET LOSS PER COMMON SHARE:		
BASIC AND DILUTED		
Continuing operations	\$ (0.23)	\$ (0.28)
Discontinued operations	<u>(0.00)</u>	<u>(0.01)</u>
	<u>\$ (0.23)</u>	<u>\$ (0.29)</u>
WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING:		
BASIC AND DILUTED	<u>37,886</u>	<u>37,669</u>
AMOUNTS ATTRIBUTABLE TO AGEX:		
Loss from continuing operations	\$ (8,579)	\$ (10,394)
Loss from discontinued operations	<u>(96)</u>	<u>(471)</u>
NET LOSS ATTRIBUTABLE TO AGEX	<u>\$ (8,675)</u>	<u>\$ (10,865)</u>

See accompanying notes to the consolidated financial statements.

AGEX THERAPEUTICS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

(In thousands)

	Year Ended December 31,	
	2021	2020
NET LOSS	\$ (8,685)	\$ (10,976)
Other comprehensive expense, net of tax:		
Foreign currency translation adjustments from discontinued operations	(143)	74
COMPREHENSIVE LOSS	(8,828)	(10,902)
Less: Comprehensive loss attributable to noncontrolling interest from continuing operations	3	5
Less: Comprehensive loss attributable to noncontrolling interest from discontinued operations	7	106
COMPREHENSIVE LOSS ATTRIBUTABLE TO AGEX COMMON STOCKHOLDERS	\$ (8,818)	\$ (10,791)

See accompanying notes to the consolidated financial statements.

AGEX THERAPEUTICS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

(In thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Noncontrolling Interest	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity (Deficit)
	Number of Shares	Par Value					
BALANCE AT DECEMBER 31, 2019	37,649	\$ 4	\$ 88,353	\$ (86,208)	\$ 399	\$ 69	\$ 2,617
Issuance of common stock to Juvenescence	29	-	37	-	-	-	37
Issuance of common stock upon vesting of restricted stock units, net of shares retired to pay employee's taxes	13	-	(9)	-	-	-	(9)
Issuance of warrants to Juvenescence	-	-	1,640	-	-	-	1,640
Stock-based compensation	-	-	933	-	-	-	933
Issuance of subsidiary common stock – LifeMap Sciences	-	-	-	-	288	-	288
Transactions with noncontrolling interests – LifeMap Sciences and ReCyte	-	-	856	-	(856)	-	-
Foreign currency translation adjustment	-	-	-	-	-	74	74
Net loss	-	-	-	(10,865)	(111)	-	(10,976)
BALANCE AT DECEMBER 31, 2020	<u>37,691</u>	<u>\$ 4</u>	<u>\$ 91,810</u>	<u>\$ (97,073)</u>	<u>\$ (280)</u>	<u>\$ 143</u>	<u>\$ (5,396)</u>
Issuance of common stock	242	-	475	-	-	-	475
Issuance of common stock upon vesting of restricted stock units, net of shares retired to pay employee's taxes	8	-	(7)	-	-	-	(7)
Issuance of warrants	-	-	757	-	-	-	757
Stock-based compensation	-	-	1,003	-	-	-	1,003
Transactions with noncontrolling interests – LifeMap Sciences	-	-	(269)	-	269	-	-
Deconsolidation of LifeMap Sciences	-	-	143	-	(22)	(143)	(22)
Net loss	-	-	-	(8,675)	(10)	-	(8,685)
BALANCE AT DECEMBER 31, 2021	<u>37,941</u>	<u>\$ 4</u>	<u>\$ 93,912</u>	<u>\$ (105,748)</u>	<u>\$ (43)</u>	<u>\$ -</u>	<u>\$ (11,875)</u>

See accompanying notes to the consolidated financial statements.

AGEX THERAPEUTICS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Year Ended December 31,	
	2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss attributable to AgeX	\$ (8,579)	\$ (10,394)
Net loss attributable to noncontrolling interest	(3)	(5)
Adjustments to reconcile net loss attributable to AgeX to net cash used in operating activities:		
Gain on deconsolidation of LifeMap Sciences (Note 3)	(106)	-
Gain on extinguishment of debt (Paycheck Protection Program Loan)	(437)	-
Depreciation expense	-	699
Amortization of intangible asset	131	132
Amortization of right-of-use asset	-	424
Amortization of debt issuance costs	1,114	487
Stock-based compensation	999	909
Changes in operating assets and liabilities:		
Accounts and grant receivables, net	128	(30)
Prepaid expenses and other current assets	760	663
Accounts payable and accrued liabilities	(772)	382
Related party payables	-	15
Insurance premium liability	(921)	(713)
Other current liabilities	(79)	(577)
Net cash used in operating activities from continuing operations	(7,765)	(8,008)
Net cash provided by (used in) operating activities from discontinued operations (Note 3)	(90)	191
Net cash used in operating activities	(7,855)	(7,817)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Proceeds from the sale of LifeMap Sciences (Note 3)	466	-
Partial collection on loan due from LifeMap Sciences	250	-
Purchase of equipment and other	-	(20)
Net cash provided by (used in) investing activities from continuing operations	716	(20)
Deconsolidation of cash and cash equivalents from discontinued operations (Note 3)	(50)	-
Net cash provided by (used in) investing activities	666	(20)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Draw down on loan facility from Juvenescence	7,000	5,700
Proceeds from the issuance of common stock	496	-
Proceeds from Paycheck Protection Program Loan	-	433
Payment of debt related costs	-	(157)
Repayment of financing lease liability	-	(15)
Net cash provided by financing activities from continuing operations	7,496	5,961
Partial payment on loan due to AgeX from discontinued operations (Note 3)	(250)	-
Net cash provided by financing activities	7,246	5,961
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	-	1
NET INCREASE (DECREASE) IN CASH, CASH EQUIVALENTS AND RESTRICTED CASH	57	(1,875)
CASH, CASH EQUIVALENTS AND RESTRICTED CASH:		
Beginning of year	577	2,452
End of year	\$ 634	\$ 577
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid during the year for interest	\$ 13	\$ 12
SUPPLEMENTAL SCHEDULE OF NONCASH FINANCING AND INVESTING ACTIVITIES:		
Issuance of common stock upon vesting of restricted stock units	\$ 16	\$ 21
Issuance of common stock to Juvenescence (Note 5)	\$ -	\$ 37
Issuance of warrants to Juvenescence (Note 5)	\$ 757	\$ 1,640

See accompanying notes to the consolidated financial statements.

AGEX THERAPEUTICS, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization, Basis of Presentation and Liquidity

AgeX Therapeutics, Inc. (“AgeX”) was incorporated in January 2017 in the state of Delaware as a subsidiary of Lineage Cell Therapeutics, Inc. (“Lineage,” formerly known as BioTime, Inc.), a publicly traded, clinical-stage biotechnology company.

AgeX is a biotechnology company focused on the development and commercialization of novel therapeutics targeting human aging and degenerative diseases. AgeX’s mission is to apply its comprehensive experience in fundamental biological processes of human aging to a broad range of age-associated medical conditions.

AgeX’s proprietary technology, based on telomerase-mediated cellular immortality and regenerative biology, allows AgeX to utilize telomerase-expressing regenerative pluripotent stem cells (“PSCs”) for the manufacture of cell-based therapies to regenerate tissues afflicted with age-related chronic degenerative disease. AgeX’s main technology platforms and product candidates are:

- PureStem[®] PSC-derived clonal embryonic progenitor cell lines that may be capable of generating a broad range of cell types for use in cell-based therapies;
- UniverCyte[™] which uses the HLA-G gene to suppress rejection of transplanted cells and tissues to confer low immune observability to cells;
- AGEX-BAT1 using adipose brown fat cells for metabolic diseases such as Type II diabetes and obesity;
- AGEX-VASC1 using vascular progenitor cells to treat tissue ischemia such as in peripheral vascular disease and ischemic heart disease; and
- Induced tissue regeneration or iTR technology to regenerate or rejuvenate cells to treat a variety of degenerative diseases including those associated with aging, as well as other potential tissue regeneration applications such as scarless wound repair.

AgeX is an “emerging growth company” as defined in the Jumpstart our Business Startups Act of 2012.

Lineage’s sale of significant ownership interest in AgeX to Juvenescence

On August 30, 2018, Lineage consummated the sale of 14,400,000 shares of common stock of AgeX owned by Lineage to Juvenescence Limited (“Juvenescence”). Prior to the transaction, Juvenescence owned 5.6% of AgeX’s issued and outstanding common stock. Upon completion of the transaction, Lineage’s ownership in AgeX was reduced from 80.4% to 40.2% of AgeX’s issued and outstanding shares of common stock, and Juvenescence’s ownership in AgeX was increased from 5.6% to 45.8% of AgeX’s issued and outstanding shares of common stock. AgeX did not receive any proceeds from the transaction. As a result of that transaction, AgeX ceased to be a subsidiary of Lineage because Lineage experienced a “loss of control” of a subsidiary, as defined by U.S. GAAP. Loss of control is deemed to have occurred when, among other things, a parent company owns less than a majority of the outstanding common stock in the subsidiary, lacks a controlling financial interest in the subsidiary and, is unable to unilaterally control the subsidiary through other means such as having, or being able to obtain, the power to elect a majority of the subsidiary’s Board of Directors based solely on contractual rights or ownership of shares holding a majority of the voting power of the subsidiary’s voting securities. All of these loss-of-control factors were present with respect to Lineage’s ownership interest in AgeX as of August 30, 2018. Accordingly, Lineage deconsolidated AgeX’s consolidated financial statements and results from its consolidated financial statements and results beginning on August 30, 2018.

On November 28, 2018 (the “Distribution Date”), Lineage distributed to its shareholders, on a pro rata basis, 12,697,028 shares of the AgeX common stock it then held (the “Distribution”). Immediately after the Distribution, Lineage retained 1,718,972 shares of AgeX common stock, representing approximately 4.8% of the common stock then issued and outstanding. Following the Distribution, AgeX common stock began publicly trading on the NYSE American under the symbol “AGE” (see Notes 5 and 8).

Disposition and Deconsolidation of LifeMap Sciences

On March 6, 2021, AgeX and its then majority-owned subsidiary LifeMap Sciences, Inc. (“LifeMap Sciences”) entered into an Agreement and Plan of Merger (the “Merger Agreement”) with Atlas Capital Partners Limited, a British Virgin Islands company limited by shares (“Atlas”), and GCLMS Acquisition Corporation (“GCLMS”), a Delaware corporation that was a wholly-owned subsidiary of Atlas. On March 15, 2021, the merger was completed pursuant to the terms of the Merger Agreement. As a result of the merger, GCLMS merged into LifeMap Sciences and (a) the shares of LifeMap Sciences common stock outstanding at the time of the merger entitled the holders of those shares to receive a pro rata portion of a \$500,000 cash payment for all shares of LifeMap Sciences common stock in the aggregate (the “Merger Consideration”), with each LifeMap Sciences shareholder’s pro rata portion of the Merger Consideration to be determined in accordance with the number of shares of LifeMap Sciences common stock owned by such shareholder as a percentage of shares of LifeMap Sciences common stock outstanding immediately before the effective date of the merger, and (b) the outstanding shares of GCLMS common stock were converted into shares of LifeMap Sciences common stock so that Atlas is now the sole shareholder of LifeMap Sciences.

AgeX received approximately \$466,400 in cash as its pro rata share of the Merger Consideration in the merger. Prior to and as a condition to the merger under the terms of the Merger Agreement, \$1,761,296 of LifeMap Sciences' indebtedness to AgeX was converted into shares of LifeMap Sciences common stock. LifeMap Sciences also paid AgeX \$250,000 in cash to pay off a portion of LifeMap Sciences' indebtedness to AgeX that was not converted into shares of LifeMap Sciences common stock.

As a result of the completion of the cash-out merger on March 15, 2021, LifeMap Sciences is no longer a subsidiary of AgeX. Accordingly, AgeX has deconsolidated LifeMap Sciences' consolidated financial statements and consolidated results of operations from AgeX, effective March 15, 2021 (the "LifeMap Deconsolidation"), in accordance with Accounting Standards Codification, or ASC 810-10-40, *Consolidation*.

See Note 3 for additional information regarding the disposition and deconsolidation of LifeMap Sciences.

Going Concern

AgeX primarily finances its operations through sales of its common stock, loans from its largest stockholder Juvenescence, and research grants. AgeX has incurred operating losses and negative cash flows since inception and had an accumulated deficit of \$105.7 million as of December 31, 2021. AgeX expects to continue to incur operating losses and negative cash flows.

Based on a strategic review of its operations, giving consideration to the status of its product development programs, human resources, capital needs and resources, and current conditions in the capital markets, AgeX's board of directors and management have adopted operating plans and budgets to extend the period over which AgeX can continue its operations with its available cash resources. Notwithstanding those operating plans and budgets, based on AgeX's most recent projected cash flows AgeX believes that its cash and cash equivalents of \$0.6 million as of December 31, 2021 plus the loan facilities provided by Juvenescence to advance up to an additional \$5,000,000 for operating capital discussed in Notes 5 and 10, and the proceeds we may receive from the sale of additional shares of our common stock in "at-the-market" transactions through a Sales Agreement with Chardan Capital, LLC ("Chardan") as a sales agent, would not be sufficient to satisfy AgeX's anticipated operating and other funding requirements for the next twelve months from the issuance of these consolidated financial statements. These conditions raise substantial doubt about AgeX's ability to continue as a going concern. AgeX will need to obtain substantial additional funding in connection with its continuing operations.

Staff Reductions and Elimination of Laboratory Facilities Lease

During April 2020, AgeX initiated staff layoffs that affected 11 research and development personnel. AgeX paid approximately \$105,000 in accrued payroll and unused paid time off and other benefits and recognized approximately \$195,000 in restructuring charges in connection with the reduction in staffing, consisting of contractual severance and other employee termination benefits. The staff reductions followed AgeX's strategic review of its operations, giving consideration to the status of its product development programs, human resources, capital needs and resources, and current conditions in the capital markets resulting from the COVID-19 pandemic.

Following the staff reductions, AgeX subleased out a significant portion of its leased laboratory space and did not renew its lease or enter into a new lease for a replacement facility when its lease expired on December 31, 2020. Instead, AgeX entered into a lease for a smaller office only space commencing January 1, 2021.

Principles of consolidation

The consolidated financial statements of AgeX are presented in accordance with U.S. GAAP. AgeX's consolidated financial statements include the accounts of its subsidiaries and certain research and development departments. AgeX consolidated its direct and indirect wholly-owned or majority-owned subsidiaries because AgeX has the ability to control their operating and financial decisions and policies through its ownership, and the noncontrolling interest is reflected as a separate element of stockholders' deficit on AgeX's consolidated balance sheets.

AgeX's consolidated balance sheet at December 31, 2020, as reported, includes LifeMap Sciences' consolidated assets and liabilities, after intercompany eliminations. However, LifeMap Sciences' consolidated assets and liabilities are not included in AgeX's consolidated balance sheet at December 31, 2021, due to the deconsolidation of LifeMap Sciences on March 15, 2021. LifeMap Sciences' consolidated financial statements and consolidated results of operations include its wholly-owned and consolidated subsidiary LifeMap Sciences, Ltd.

AgeX's consolidated statements of operations for the year ended December 31, 2021 include LifeMap Sciences' consolidated results for the period through March 15, 2021 rather than the day immediately preceding the deconsolidation due to the conversion of \$1,761,296 of LifeMap Sciences' indebtedness to AgeX into shares of LifeMap Sciences common stock on March 15, 2021 followed by the completion of the cash-out merger on the same day. For the year ended December 31, 2020, AgeX's consolidated results include LifeMap Sciences' consolidated results for the full period presented.

AgeX has one operating subsidiary, ReCyte Therapeutics, Inc. ("ReCyte"). ReCyte is an early stage pre-clinical research and development company involved in stem cell-derived endothelial and cardiovascular related progenitor cells for the treatment of vascular disorders and ischemic conditions. AgeX owns 94.8% of the outstanding capital stock of ReCyte.

All material intercompany accounts and transactions between AgeX and its subsidiaries have been eliminated in consolidation.

Use of estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period with consideration given to materiality. Significant estimates and assumptions which are subject to significant judgment include those related to going concern assessment of consolidated financial statements, allocations and adjustments necessary for carve-out basis of presentation, including the separate return method for income taxes, useful lives associated with long-lived assets, including evaluation of asset impairment, allowances for uncollectible accounts receivables, loss contingencies, deferred income taxes and tax reserves, including valuation allowances related to deferred income taxes, and assumptions used to value stock-based awards or other equity instruments. Actual results could differ materially from those estimates. To the extent there are material differences between the estimates and actual results, AgeX's future results of operations will be affected.

Transactions with noncontrolling interests of subsidiaries

AgeX accounts for a change in ownership interests in its subsidiaries that does not result in a change of control of the subsidiary under the provisions of ASC 810-10-45-23, *Consolidation – Other Presentation Matters*, which prescribes the accounting for changes in ownership interest that do not result in a change in control of the subsidiary, as defined by U.S. GAAP, before and after the transaction. Under this guidance, changes in a controlling stockholder's ownership interest that do not result in a change of control, as defined by U.S. GAAP, in the subsidiary are accounted for as equity transactions. Accordingly, if the controlling stockholder retains control, no gain or loss is recognized in the statements of operations of the controlling stockholder. Similarly, the controlling stockholder will not record any additional acquisition adjustments to reflect its subsequent purchases of additional shares in the subsidiary if there is no change of control. Only a proportional and immediate transfer of carrying value between the controlling and the noncontrolling stockholders occurs based on the respective ownership percentages.

Reclassifications

Certain reclassifications have been made to the prior years' consolidated financial statements to conform to current year presentation of discontinued operations. Certain financial information is presented on a rounded basis, which may cause minor differences. See Note 3 for further information on discontinued operations.

Liquidity and impact of COVID-19

In addition to general economic and capital market trends and conditions, AgeX's ability to raise sufficient additional capital to finance its operations from time to time will depend on a number of factors specific to AgeX's operations such as operating expenses and progress in out-licensing its technologies and development of its product candidates. The availability of financing may be adversely impacted by the COVID-19 pandemic which could depress national and international economies and disrupt capital markets, supply chains, and aspects of AgeX's operations. The extent to which the ongoing COVID-19 pandemic will ultimately impact AgeX's business, results of operations, financial condition, or cash flows is highly uncertain and difficult to predict because it will depend on many factors that are outside AgeX's control. The unavailability or inadequacy of financing to meet future capital needs could force AgeX to modify, curtail, delay, or suspend some or all aspects of planned operations. Sales of additional equity securities could result in the dilution of the interests of its stockholders. AgeX cannot assure that adequate financing will be available on favorable terms, if at all.

2. Summary of Significant Accounting Policies

Going concern assessment

AgeX assesses going concern uncertainty for its consolidated financial statements to determine if AgeX has sufficient cash and cash equivalents on hand and working capital to operate for a period of at least one year from the date the consolidated financial statements are issued or are available to be issued, which is referred to as the "look-forward period" as defined by Financial Accounting Standard Board's ("FASB") ASU No. 2014-15. As part of this assessment, based on conditions that are known and reasonably knowable to AgeX, AgeX will consider various scenarios, forecasts, projections, and estimates, and AgeX will make certain key assumptions, including the timing and nature of projected cash expenditures or programs, and its ability to delay or curtail those expenditures or programs, if necessary, among other factors. Based on this assessment, as necessary or applicable, AgeX makes certain assumptions concerning its ability to curtail or delay research and development programs and expenditures within the look-forward period in accordance with ASU No. 2014-15.

Fair value measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. To increase the comparability of fair value measures, the following hierarchy prioritizes the inputs to valuation methodologies used to measure fair value (ASC 820-10-50), *Fair Value Measurements and Disclosures*:

- Level 1 – Inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2 – Inputs to the valuation methodology include quoted prices for similar assets or liabilities in active markets, and inputs that are observable for the assets or liabilities, either directly or indirectly, for substantially the full term of the financial instruments.
- Level 3 – Inputs to the valuation methodology are unobservable; that reflect management’s own assumptions about the assumptions market participants would make and significant to the fair value.

In determining fair value, AgeX utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible, and also considers counterparty credit risk in its assessment of fair value. For the periods presented, AgeX has no financial assets or liabilities recorded at fair value on a recurring basis, except for cash and cash equivalents primarily consisting of money market funds. These assets are measured at fair value using the period-end quoted market prices as a Level 1 input.

The carrying amounts of accounts receivable, net, prepaid expenses and other current assets, related party amounts due to affiliates, accounts payable, accrued liabilities and other current liabilities approximate fair values because of the short-term nature of these items.

Cash and cash equivalents

AgeX considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. As of December 31, 2021 and 2020, AgeX’s cash balances totaled \$0.6 million and \$0.5 million, respectively, and consist entirely of bank account deposits and amounts held in money market funds.

Concentrations of credit risk

Financial instruments that potentially subject AgeX to significant concentrations of credit risk consist primarily of cash and cash equivalents. AgeX limits the amount of credit exposure of cash balances by maintaining its accounts in high credit quality financial institutions. Cash equivalent deposits with financial institutions may occasionally exceed the limits of insurance on bank deposits; however, AgeX has not experienced any losses on such accounts.

Restricted cash

In accordance with ASU 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*, a reconciliation of AgeX’s cash and cash equivalents in the consolidated balance sheets to cash, cash equivalents and restricted cash in the consolidated statements of cash flows for all periods presented is as follows (in thousands):

	Year Ended December 31,	
	2021	2020
Cash and cash equivalents	\$ 584	\$ 527
Restricted cash included in deposits	50	50
Total cash, cash equivalents, and restricted cash as shown in the consolidated statements of cash flows	<u>\$ 634</u>	<u>\$ 577</u>

Restricted cash entirely represents the deposit required to maintain AgeX’s corporate credit card program. All restricted cash was included in deposits and other long-term assets in the consolidated balance sheets.

Accounts receivable, net

AgeX establishes an allowance for doubtful accounts based on the evaluation of the collectability of its receivables after considering a variety of factors, including the length of time receivables are past due, significant events that may impair the customer's ability to pay, such as a bankruptcy filing or deterioration in the customer's operating results or financial position, and historical experience. If circumstances related to customers change, estimates of the recoverability of receivables would be further adjusted. For subscription contracts in which the subscription term commences before a payment was due, LifeMap Sciences recorded an accounts receivable as the subscription was earned over time and billed the customer according to the contract terms. There were no amounts reserved for doubtful accounts as of December 31, 2021 and 2020.

Equipment and furniture, net

Equipment and furniture is stated at cost and is being depreciated using the straight-line method over their estimated useful lives ranging from 3 to 10 years. Maintenance and repairs are expensed as incurred whereas significant renewals and betterments are capitalized. When assets are retired or otherwise disposed of, the cost and the related accumulated depreciation are removed from the respective accounts and any resulting gain or loss is reflected in AgeX's consolidated results of operations.

Leases

On January 1, 2019, AgeX adopted ASU 2016-02, *Leases* (Topic 842, "ASC 842") and its subsequent amendments affecting AgeX: (i) ASU 2018-10, *Codification Improvements to Topic 842, Leases*, and (ii) ASU 2018-11, *Leases (Topic 842): Targeted improvements*, using the modified retrospective method.

AgeX management determines if an arrangement is a lease at inception. Leases are classified as either financing or operating, with classification affecting the pattern of expense recognition in the consolidated statements of operations. When determining whether a lease is a financing lease or an operating lease, ASC 842 does not specifically define criteria to determine "major part of remaining economic life of the underlying asset" and "substantially all of the fair value of the underlying asset." For lease classification determination, AgeX continues to use (i) 75% or greater to determine whether the lease term is a major part of the remaining economic life of the underlying asset and (ii) 90% or greater to determine whether the present value of the sum of lease payments is substantially all of the fair value of the underlying asset. Under the available practical expedients, and as applicable, AgeX accounts for the lease and non-lease components as a single lease component. AgeX recognizes right-of-use ("ROU") assets and lease liabilities for leases with terms greater than twelve months in the consolidated balance sheet.

ROU assets represent an entity's right to use an underlying asset during the lease term and lease liabilities represent an entity's obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. If the lease agreement does not provide an implicit rate in the contract, an entity uses its incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. The operating lease ROU asset also includes any lease payments made and excludes lease incentives. The lease terms may include options to extend or terminate the lease when it is reasonably certain that the entity will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

Upon adoption of ASC 842 and based on the practical expedients available under that standard, AgeX did not reassess any expired or existing contracts, reassess the lease classification for any expired or existing leases and reassess initial direct costs for existing leases. AgeX also elected not to capitalize leases that have terms of twelve months or less.

AgeX's sublease of its office and laboratory facility, which commenced on April 2, 2019 and ended on December 31, 2020, was subject to ASC 842. AgeX recognized its lease as a right-of-use asset included in property and equipment, net and operating lease liability on its balance sheet in accordance with ASC 842 up until the lease terminated on December 31, 2020 (see Note 9). During 2020, AgeX as a sublessor subleased portions of its office and laboratory space to certain unaffiliated third parties. These subleases are not accounted for under ASC 842 as amounts are not material and or the sublease periods are under one year.

On November 3, 2020, AgeX entered into a one year lease effective January 1, 2021 for office space only comprising 135 square feet in a building in an office and research park at 1101 Marina Village Parkway, Suite 201, Alameda, California. Base monthly rent was \$947 over the lease term. AgeX has elected to not apply the recognition requirements under ASC 842 and instead recognizes the lease payments as lease cost on a straight-line basis over the lease term as lease payments are not deemed material. AgeX has renewed this lease for another 12 months effective January 1, 2022 for base monthly rent of \$1,074. AgeX has elected to not apply the recognition requirements under ASC 842 for the renewed lease agreement under the guidance for similar reasons aforementioned.

Long-lived intangible assets

Long-lived intangible assets, consisting primarily of acquired patents, patent applications, and licenses to use certain patents, including acquired in-process research and development ("IPR&D") with alternative future uses, are stated at acquired cost, less accumulated amortization. Amortization expense is computed using the straight-line method over the estimated useful lives of the assets, generally over 10 years (see Note 4).

Impairment of long-lived assets

Long-lived assets, including long-lived intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be fully recoverable. If an impairment indicator is present, AgeX evaluates recoverability by a comparison of the carrying amount of the assets to future undiscounted net cash flows expected to be generated by the assets. If the assets are impaired, the impairment recognized is measured by the amount by which the carrying amount exceeds the estimated fair value of the assets. Through December 31, 2021, there have been no impairment losses.

Accounting for warrants

AgeX determines the accounting classification of warrants it issues, as either liability or equity, by first assessing whether the warrants meet liability classification in accordance with ASC 480-10, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*, then in accordance with ASC 815-40, *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock*. Under ASC 480, warrants are considered liability classified if the warrants are mandatorily redeemable, obligate AgeX to settle the warrants or the underlying shares by paying cash or other assets, or warrants that must or may require settlement by issuing a variable number of shares. If warrants do not meet liability classification under ASC 480-10, AgeX assesses the requirements under ASC 815-40, which states that contracts that require or may require the issuer to settle the contract for cash are liabilities recorded at fair value, irrespective of the likelihood of the transaction occurring that triggers the net cash settlement feature. If the warrants do not require liability classification under ASC 815-40, and in order to conclude equity classification, AgeX also assesses whether the warrants are indexed to its common stock and whether the warrants are classified as equity under ASC 815-40 or other applicable U.S. GAAP. After all relevant assessments, AgeX concludes whether the warrants are classified as liability or equity. Liability classified warrants require fair value accounting at issuance and subsequent to initial issuance with all changes in fair value after the issuance date recorded in the statements of operations. Equity classified warrants only require fair value accounting at issuance with no changes recognized subsequent to the issuance date. AgeX does not have any liability classified warrants as of any period presented See Notes 5 and 10 for additional information regarding warrants.

Stock-based compensation

AgeX recognizes compensation expense related to employee option grants and restricted stock grants, if any, in accordance with FASB ASC 718, *Compensation – Stock Compensation* (“ASC 718”).

AgeX estimates the fair value of employee stock-based payment awards on the grant-date and recognizes the resulting fair value, net of estimated forfeitures for grants prior to 2017, over the requisite service period. Upon adoption of Accounting Standards Update (“ASU”) 2016-09 on January 1, 2017 as further discussed below, forfeitures are accounted for as they occur instead of based on the number of awards that were expected to vest prior to adoption of ASU 2016-09.

AgeX uses the Black-Scholes option pricing model for estimating the fair value of options granted under the Incentive Plan. The fair value of each restricted stock grant, if any, is determined based on the value of the common stock granted or sold. AgeX has elected to treat stock-based payment awards with time-based service conditions as a single award and recognizes stock-based compensation on a straight-line basis over the requisite service period.

Compensation expense for non-employee stock-based awards is recognized in accordance with ASC 718. Stock option awards issued to non-employees, principally consultants or outside contractors, as applicable, are accounted for at fair value using the Black-Scholes option pricing model. Management believes that the fair value of the stock options and restricted stock units can more reliably be measured than the fair value of services received. AgeX records compensation expense based on the then-current fair values of the stock options and restricted stock units at the grant date. Compensation expense for non-employee grants is recorded on a straight-line basis in the consolidated statements of operations.

The Black-Scholes option pricing model requires AgeX to make certain assumptions including the fair value of the underlying common stock, the expected term, the expected volatility, the risk-free interest rate and the dividend yield (see Note 7).

The fair value of the shares of common stock underlying the stock options is determined in accordance with the Incentive Plan and is based on prevailing market prices on the NYSE American where AgeX common stock is traded.

The expected term of employee stock options represents the weighted-average period that the stock options are expected to remain outstanding. AgeX estimates the expected term of options granted using the “simplified method” provided under *Staff Accounting Bulletin, Topic 14*, or SAB Topic 14.

Because AgeX's common stock had no publicly traded history prior to November 29, 2018, for the years ended December 31, 2021 and 2020, AgeX estimated the expected volatility using its own stock price volatility to the extent applicable or a combination of its stock price volatility and the stock price volatility of peer companies, for a period equal to the expected term of the options. The peer companies used include selected public companies within the biotechnology industry with comparable characteristics to AgeX, including similarity in size, lines of business, market capitalization, revenue and financial leverage.

The risk-free interest rate assumption is based upon observed interest rates on the United States government securities appropriate for the expected term of AgeX's stock options.

The dividend yield assumption is based on AgeX's history and expectation of dividend payouts. AgeX has never declared or paid any cash dividends on its common stock, and AgeX does not anticipate paying any cash dividends in the foreseeable future.

All excess tax benefits and tax deficiencies from stock-based compensation awards accounted for under ASC 718 are recognized as an income tax benefit or expense, respectively, in the consolidated statements of operations. An excess income tax benefit arises when the tax deduction of a share-based award for income tax purposes exceeds the compensation cost recognized for financial reporting purposes and, a tax deficiency arises when the compensation cost exceeds the tax deduction.

Stock-based compensation expense for the years ended December 31, 2021 and 2020 consists of stock-based compensation under the Incentive Plan (see Note 7).

Certain of AgeX's consolidated subsidiaries have had their own share-based compensation plans however, there are no awards granted and outstanding under those plans as of December 31, 2021 and 2020. For share-based compensation awards granted by those privately-held consolidated subsidiaries under their respective equity plans, AgeX determines the fair value of the options granted under those plans using similar methodologies and assumptions AgeX used for its stock options discussed above.

Although the fair value of stock options and restricted stock units is determined in accordance with FASB guidance, changes in the assumptions and allocations can materially affect the estimated value and therefore the amount of compensation expense recognized in the consolidated financial statements.

Income taxes

For Federal and California purposes, AgeX's activity through August 30, 2018 was included in Lineage's federal consolidated and California combined tax returns. However, the net operating losses and research and development credits generated before August 17, 2017, the contribution date to AgeX, will remain as tax attributes of Lineage (see Note 8). In general, net operating losses and other tax credit carryforwards generated by legal entities in a consolidated federal tax group or a combined state tax group, collectively "the tax group", are available to other members of the tax group depending on the nature of the transaction that a member may enter into while still in the tax group. However, under the Tax Matters Agreement between Lineage and AgeX entered into on August 17, 2017, any use of a member's net operating loss and other tax credit carryforwards by the other member is subject to reimbursement by the benefiting member for the actual tax benefit realized. Since the August 30, 2018 deconsolidation of AgeX and to date, neither Lineage nor AgeX has used the tax attributes of the other.

AgeX accounts for income taxes in accordance with ASC 740, which prescribes the use of the asset and liability method, whereby deferred tax asset or liability account balances are calculated at the balance sheet date using current tax laws and enacted rates in effect. Valuation allowances are established when necessary to reduce deferred tax assets when it is more likely than not that a portion or all of the deferred tax assets will not be realized. AgeX's judgments, estimates and projections regarding future taxable income may change over time due to changes, among other factors, in market conditions, changes in tax laws, and tax planning strategies. If AgeX's assumptions and consequently its estimates change in the future, the valuation allowance may be increased or decreased, which may have a material impact on AgeX's consolidated financial statements.

The guidance also prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not sustainable upon examination by taxing authorities. AgeX recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense. No unrecognized tax benefits have been recorded and no amounts were accrued for the payment of interest and penalties as of December 31, 2021 and 2020. AgeX does not expect that the total amount of unrecognized tax benefits will materially change over the next twelve months. AgeX is currently unaware of any tax issues under review.

On December 22, 2017, the United States enacted major federal tax reform legislation, Public Law No. 115-97, commonly referred to as the 2017 Tax Cuts and Jobs Act (“2017 Tax Act”), which enacted a broad range of changes to the Internal Revenue Code. Changes to taxes on corporations impacted by the 2017 Tax Act include, but not limited to, lowering the U.S. federal tax rates to a 21% flat tax rate, eliminating the corporate alternative minimum tax (“AMT”), imposing additional limitations on the deductibility of interest and net operating losses, allowing any net operating loss (“NOLs”) generated in tax years ending after December 31, 2017 to be carried forward indefinitely and generally repealing carrybacks, reducing the maximum deduction for NOL carryforwards arising in tax years beginning after 2017 to a percentage of the taxpayer’s taxable income, and allowing for additional expensing of certain capital expenditures. Future guidance from the Internal Revenue Service and other tax authorities may affect certain aspects of the 2017 Tax Act, for example, the Coronavirus Aid, Relief, and Economic Security Act (the “CARES Act”) and the Consolidated Appropriations Act, 2021 (“CAA”) modified certain provisions of the 2017 Tax Act. In addition, it is uncertain if and to what extent various states will conform to the 2017 Tax Act, the CARES Act or the CAA. The 2017 Tax Act also puts into effect a number of changes impacting operations outside of the United States including, but not limited to, the imposition of a one-time tax “deemed repatriation” on accumulated offshore earnings not previously subject to U.S. tax, and shifts the U.S. taxation of multinational corporations from a worldwide system of taxation to a territorial system. ASC 740 requires the effects of changes in tax rates and laws on deferred tax balances (including the effects of the one-time transition tax) to be recognized in the period in which the legislation is enacted (see Note 8).

Beginning in 2018, the 2017 Tax Act subjects a U.S. stockholder to tax on Global Intangible Low Tax Income “GILTI” earned by certain foreign subsidiaries. In general, GILTI is the excess of a U.S. stockholder’s total net foreign income over a deemed return on tangible assets. The provision further allows a deduction of 50% of GILTI, however this deduction is limited to the company’s pre-GILTI U.S. income. For the year ended December 31, 2020, AgeX’s foreign entity operated at a book loss. However, for GILTI purposes, US tax laws are applied to the foreign activity and as a result there was an immaterial amount included in income for 2020. For the year ended December 31, 2021, AgeX’s foreign entity operated at an immaterial loss; therefore, no GILTI was included in income. Current interpretations under ASC 740 state that an entity can make an accounting policy election to either recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years or to provide for the tax expense related to GILTI in the year the tax is incurred as a period expense. We have elected to account for GILTI as a current period expense when incurred.

Revenue recognition

During the first quarter of 2018, AgeX adopted FASB ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which created a single, principle-based revenue recognition model that supersedes and replaces nearly all existing U.S. GAAP revenue recognition guidance. AgeX adopted ASU 2014-09 using the modified retrospective transition method applied to those contracts which were not completed as of the adoption date. Results for reporting periods beginning on January 1, 2018 and thereafter are presented under Topic 606. AgeX’s largest source of revenue was subscription and advertising revenues generated by LifeMap Sciences prior to the LifeMap Deconsolidation.

AgeX recognizes revenue in a manner that depicts the transfer of control of a product or a service to a customer and reflects the amount of the consideration it expects to receive in exchange for such product or service. In doing so, AgeX follows a five-step approach: (i) identify the contract with a customer, (ii) identify the performance obligations in the contract, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations, and (v) recognize revenue when (or as) the customer obtains control of the product or service. AgeX considers the terms of a contract and all relevant facts and circumstances when applying the revenue recognition standard. AgeX applies the revenue recognition standard, including the use of any practical expedients, consistently to contracts with similar characteristics and in similar circumstances.

In the applicable paragraphs below, AgeX has summarized its revenue recognition policies for its various revenue sources in accordance with Topic 606.

Revenue recognition by source and geography: Revenues are recognized when control of the promised goods or services is transferred to customers, or in the case of governmental entities funding a grant, when allowable expenses are incurred, in an amount that reflects the consideration AgeX or a subsidiary, depending on which company has the customer or the grant, expects to be entitled to in exchange for those goods or services.

The following table presents AgeX’s consolidated revenues disaggregated by source for continuing operations (in thousands).

REVENUES:	Year Ended December 31,	
	2021	2020
Grant revenues	\$ 104	\$ 307
Other revenues	40	54
Total revenues	\$ 144	\$ 361

The following table presents consolidated revenues for continuing operations (in thousands), disaggregated by geography, based on the billing addresses of customers.

REVENUES:	Year Ended December 31,	
	2021	2020
United States	\$ 107	\$ 323
Foreign	37	38
Total revenues	\$ 144	\$ 361

Subscription and advertisement revenues: LifeMap Sciences sold subscription-based products, including research databases and software tools, for biomedical, gene, and disease research. LifeMap Sciences sold these subscriptions primarily through the internet to biotech and pharmaceutical companies worldwide. LifeMap Sciences' principal subscription product was the GeneCards[®] Suite, which includes the GeneCards[®] human gene database, and the MalaCards[™] human disease database. LifeMap Sciences' performance obligations for subscriptions included a license of intellectual property related to its genetic information packages and premium genetic information tools. These licenses were deemed functional licenses that provide customers with a "right to access" to LifeMap Sciences' intellectual property during the subscription period and, accordingly, revenue was recognized over a period of time, which was generally the subscription period. Payments were typically received at the beginning of a subscription period and revenue was recognized according to the type of subscription sold. For subscription contracts in which the subscription term commenced before a payment was due, LifeMap Sciences recorded an account receivable because the subscription was earned over time and billed the customer according to the contract terms. LifeMap Sciences deferred subscription revenues primarily represented subscriptions for which cash payment was received for the subscription term, but the subscription term was not completed as of the balance sheet date reported.

LifeMap Sciences' deferred subscription revenues primarily represent subscriptions for which cash payment was received for the subscription term, but the subscription term was not completed as of the balance sheet date reported. LifeMap Sciences recognized \$0.3 million and \$1.3 million in subscription and advertisement revenues for the years ended December 31, 2021 and 2020, respectively. Deferred revenues in the consolidated balance sheets amounted to \$0.3 million as of December 31, 2020, however as of December 31, 2021, there was no deferred revenues due to the LifeMap Deconsolidation (see Note 3).

LifeMap Sciences licensed from third parties the databases and software it commercialized and had a contractual obligation to pay royalties to the licensor on subscriptions sold. These costs were included in operating loss from discontinued operations on the consolidated statements of operations when the cash was received and the royalty obligation was incurred as the royalty payments did not qualify for capitalization of costs to fulfill a contract under ASC 340-40, *Other Assets and Deferred Costs - Contracts with Customers*.

Grant revenues: AgeX accounts for grants received to perform research and development services in accordance with ASC 730-20, *Research and Development Arrangements*. At the inception of the grant, we perform an assessment as to whether the grant is a liability or a contract to perform research and development services for others. If AgeX or a subsidiary receiving the grant is obligated to repay the grant funds to the grantor regardless of the outcome of the research and development activities, then AgeX is required to estimate and recognize that liability. Alternatively, if AgeX or a subsidiary receiving the grant is not required to repay, or if it is required to repay the grant funds only if the research and development activities are successful, then the grant agreement is accounted for as a contract to perform research and development services for others, in which case, grant revenue is recognized when the related research and development expenses are incurred.

In applying the provisions of Topic 606, AgeX has determined that government grants are out of the scope of Topic 606 because the government entities do not meet the definition of a "customer", as defined by Topic 606, as there is not considered to be a transfer of control of good or services to the government entities funding the grant. In the absence of applicable guidance under U.S. GAAP, AgeX's policy is to recognize grant revenue when the related costs are incurred, provided that the applicable conditions under the government contracts have been met. Only costs that are allowable under the grant award, certain government regulations and the National Institutes of Health's supplemental policy and procedure manual may be claimed for reimbursement, and the reimbursements are subject to routine audits from governmental agencies from time to time. Costs incurred are recorded in research and development expenses on the accompanying consolidated statements of operations.

AgeX believes the recognition of revenue as costs are incurred and amounts become realizable is analogous to the concept of transfer of control of a service over time under ASC 606.

In September 2018, AgeX was awarded a grant of up to approximately \$225,000 from the National Institutes of Health (NIH). The NIH grant provided funding for continued development of AgeX technologies for treating osteoporosis. Grant funds were made available by the NIH as allowable expenses were incurred. For the year ended December 31, 2020, AgeX incurred approximately \$25,000 of allowable expenses under the NIH grant and recognized a corresponding amount of grant revenues. As of March 31, 2020, AgeX expended the full amount available under this grant.

On April 8, 2020, AgeX was awarded a grant of up to approximately \$386,000 from the NIH. The NIH grant provides funding for continued development of AgeX's technologies for treating stroke. The grant funds will be made available by the NIH to AgeX as allowable expenses are incurred. As of December 31, 2021, AgeX incurred approximately \$104,000 of allowable expenses under the NIH grant and recognized a corresponding amount of grant revenues.

Arrangements with multiple performance obligations – AgeX may enter into contracts with customers that include multiple performance obligations. For such arrangements, AgeX will allocate revenue to each performance obligation based on its relative standalone selling price. AgeX will determine or estimate standalone selling prices based on the prices charged, or that would be charged, to customers for that product or service. As of and for the year ended December 31, 2021, AgeX did not have significant arrangements with multiple performance obligations.

Research and development

Research and development expenses consist primarily of personnel costs and related benefits, including stock-based compensation, amortization of intangible assets, outside consultants and suppliers, and license fees paid to third parties to acquire patents or licenses to use patents and other technology. Research and development expenses incurred and reimbursed by grants from third parties or governmental agencies, including service revenues from co-development projects with customers, if any and as applicable, approximate the respective revenues recognized in the consolidated statements of operations.

General and administrative

General and administrative expenses consist primarily of compensation and related benefits, including stock-based compensation, for executive and corporate personnel, and professional and consulting fees.

Foreign currency translation and other comprehensive income or loss, foreign currency transaction gains and losses

In countries in which AgeX operates where the functional currency is other than the U.S. dollar, assets and liabilities are translated using published exchange rates in effect at the consolidated balance sheet date. Revenues and expenses and cash flows are translated using an approximate weighted average exchange rate for the period. Resulting foreign currency translation adjustments are recorded as other comprehensive income, net of tax, in the consolidated statements of comprehensive loss and included as a component of accumulated other comprehensive income on the consolidated balance sheets. Foreign currency translation adjustments are immaterial for all periods presented.

For transactions denominated in other than the functional currency of AgeX or its subsidiaries, AgeX recognizes transaction gains and losses in the consolidated statements of operations and classifies the gain or loss based on the nature of the item that generated it. The majority of AgeX's foreign currency transaction gains and losses were generated by LifeMap Sciences Ltd.'s intercompany payable due to LifeMap Sciences, Inc., which are U.S. dollar-denominated, while LifeMap Sciences Ltd.'s functional currency is the Israeli New Shekel ("NIS"). Accordingly, foreign currency remeasurement gains and losses related to this intercompany payable are included in other income (expense), net.

Segments

AgeX's executive management team, as a group, represents the entity's chief operating decision makers. To date, AgeX's executive management team has viewed AgeX's operations as one segment that includes the research and development of regenerative medicine technologies targeting the diseases of aging and metabolic disorders, oncology, and neurological diseases and disorders, blood and vascular system diseases and disorders, and pluripotent cell technologies. As a result, the financial information disclosed materially represents all of the financial information related to AgeX's sole operating segment.

Basic and diluted net loss per share attributable to common stockholders

Basic loss per share is calculated by dividing net loss attributable to AgeX common stockholders by the weighted average number of shares of common stock outstanding, net of unvested restricted stock or restricted stock units, subject to repurchase by AgeX, if any, during the period. Diluted loss per share is calculated by dividing the net income attributable to AgeX common stockholders, if any, by the weighted average number of shares of common stock outstanding, adjusted for the effects of potentially dilutive common stock issuable under outstanding stock options, warrants, and restricted stock units, using the treasury-stock method, and convertible preferred stock, if any, using the if-converted method, and treasury stock held by subsidiaries, if any.

For the years ended December 31, 2021 and 2020, because AgeX reported a net loss attributable to common stockholders, all potentially dilutive common stock, comprised of stock options, restricted stock units and warrants, is antidilutive.

The following weighted average common stock equivalents were excluded from the computation of diluted net loss per share of common stock for the periods presented because including them would have been antidilutive (in thousands):

	Year Ended December 31,	
	2021	2020
Stock options	3,145	2,875
Warrants	3,492	1,473
Restricted stock units	23	37

Recently adopted accounting pronouncements

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which modifies ASC 740 to simplify the accounting for income taxes. The new standard removes certain exceptions for recognizing deferred taxes for investments, performing intraperiod allocation and calculating income taxes in interim periods. The new standard also adds guidance to reduce complexity in certain areas, including recognizing deferred taxes for tax goodwill and allocating taxes to members of a consolidated group. ASU 2019-12 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020, with early adoption permitted. AgeX adopted the new guidance effective January 1, 2021, and determined the adoption did not have a material impact on its consolidated financial statements.

In August 2020, the FASB issued ASU No. 2020-06, *Debt - Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40)*. The amendments in this update affect entities that issue convertible instruments and/or contracts indexed to and potentially settled in an entity's own equity. The new standard simplifies the accounting for convertible debt and convertible preferred stock by removing the requirements to separately present certain conversion features in equity. For AgeX, which qualifies as a smaller reporting company, the amendments in the new standard are effective for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. AgeX adopted the new guidance effective January 1, 2021, and determined the adoption did not have a material impact on its consolidated financial statements.

Recently issued accounting pronouncements not yet adopted

In May 2021, the FASB issued ASU No. 2021-04, *Earnings Per Share (Topic 260), Debt—Modifications and Extinguishments (Subtopic 470-50), Compensation—Stock Compensation (Topic 718), and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40)*. The amendment in this update addresses how an issuer should account for modifications made to equity-classified written call options. The guidance in the standard requires the issuer to treat a modification of an equity-classified call option that does not cause the instrument to become liability-classified as an exchange of the original call option for a new call option. This guidance applies whether the modification is structured as an amendment to the terms and conditions of the call option or as termination of the original call option and issuance of a new call option. The Emerging Issues Task Force (EITF) concluded that the recognition of the modification depends on the nature of the transaction in which a warrant is modified. If there is more than one element in a transaction (for example, if the modification involves both a debt modification and an equity issuance), then the guidance requires the issuer to allocate the effect of the option modification to each element. The amendments in the new standard are effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. An entity should apply the amendments prospectively to modifications or exchanges occurring on or after the effective date of the amendments. Early adoption is permitted for all entities, including adoption in an interim period. If an entity elects to early adopt the amendments in this ASU in an interim period, the guidance should be applied as of the beginning of the fiscal year that includes that interim period. AgeX is currently evaluating the timing and effect the new guidance will have on its consolidated financial statements.

In November 2021, the FASB issued ASU No. 2021-10, *Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance*. The amendments in this update require disclosures about transactions with a government that have been accounted for by analogizing to a grant or contribution accounting model to increase transparency about (1) the types of transactions, (2) the accounting for the transactions, and (3) the effect of the transactions on an entity's financial statements. The amendments are effective for all entities within their scope, which excludes not-for-profit entities and employee benefit plans, for financial statements issued for annual periods beginning after December 15, 2021. Early application of the amendment is permitted. AgeX is currently evaluating the timing and effect the new guidance will have on its consolidated financial statements.

CARES Act

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security ("CARES") Act was enacted and signed into law. The CARES Act, among other things, includes provisions relating to refundable payroll tax credits, deferment of employer side social security payments, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations, and technical corrections to tax depreciation methods for qualified improvement property. AgeX reviewed the provisions of the CARES Act but does not expect it to have a material impact to its tax provision or its consolidated financial statements. As described in Note 9, AgeX has obtained a loan under the Paycheck Protection Program under the CARES Act, the repayment of which was forgiven in February 2021.

3. Disposition and Deconsolidation of LifeMap Sciences

Discontinued Operations

On March 6, 2021, AgeX and LifeMap Sciences entered into the Merger Agreement with Atlas and GCLMS. On March 15, 2021, the merger was completed pursuant to the terms of the Merger Agreement. As a result of the merger, GCLMS merged into LifeMap Sciences and (a) the shares of LifeMap Sciences common stock outstanding at the time of the merger entitled the holders of those shares to receive a pro rata portion of the \$500,000 total Merger Consideration, with each LifeMap Sciences shareholder's pro rata portion of the Merger Consideration determined in accordance with the number of shares of LifeMap Sciences common stock owned by such shareholder as a percentage of shares of LifeMap Sciences common stock outstanding immediately before the effective date of the merger, and (b) the outstanding shares of GCLMS common stock were converted into shares of LifeMap Sciences common stock so that Atlas is now the sole shareholder of LifeMap Sciences.

AgeX received approximately \$466,400 in cash as its pro rata share of the Merger Consideration in the merger. Prior to and as a condition to the merger under the terms of the Merger Agreement, \$1,761,296 of LifeMap Sciences' indebtedness to AgeX was converted into shares of LifeMap Sciences common stock. LifeMap Sciences also paid AgeX \$250,000 in cash to pay off a portion of LifeMap Sciences' indebtedness to AgeX that was not converted into shares of LifeMap Sciences common stock.

The following table presents the major classes of assets and liabilities of LifeMap Sciences included in AgeX's consolidated balance sheet as of December 31, 2020 (in thousands).

	December 31, 2020
Cash and cash equivalents	\$ 391
Accounts and grants receivable, net	173
Prepaid expenses and other current assets	7
Total current assets	571
Intangible assets, net	591
Accounts payable and accrued liabilities	161
Deferred revenues	275
Insurance premium and other current liabilities	1,995
Total current liabilities	2,431
Deferred revenues, net of current portion	64
Net liabilities of discontinued operations	\$ (1,333)

The results of operations and cash flows for LifeMap Sciences are reported as discontinued operations under U.S. GAAP in accordance with ASC 205-20, *Discontinued Operations*, for all periods presented in our consolidated financial statements. AgeX will not have any continuing involvement in LifeMap Sciences subsequent to the consummation of the merger on March 15, 2021. The following table presents the operating results of LifeMap Sciences that have been treated as discontinued operations for the periods presented:

	Year Ended December 31,	
	2021	2020
Net revenues	\$ 277	\$ 1,507
Costs, operating and other expenses	(380)	(2,234)
Loss from discontinued operations	(103)	(727)
Income tax provision	-	150
Net loss from discontinued operations attributable to noncontrolling interest	7	106
Loss from discontinued operations ⁽¹⁾	\$ (96)	\$ (471)

(1) Does not include \$106,000 gain on the deconsolidation of LifeMap Sciences recognized by AgeX. When dispositions occur in the normal course of business, gains or losses on the sale of such businesses or assets are recognized in the income statement. The gain on the sale of LifeMap Sciences is presented in the line item *Gain on deconsolidation of LifeMap Sciences*. There were no gains or losses resulting from the sale of businesses or assets that did not meet the criteria for a discontinued operation during the years ended December 31, 2021 and 2020.

Deconsolidation

As a result of the completion of the cash-out merger on March 15, 2021, LifeMap Sciences is no longer a subsidiary of AgeX. Effective March 15, 2021, AgeX deconsolidated LifeMap Sciences' consolidated financial statements and consolidated results of operations from those of AgeX under U.S. GAAP ASC 810-10-40-4, *Deconsolidation of a Subsidiary or Derecognition of a Group of Assets*, due to the disposition of LifeMap Sciences on that date.

AgeX's consolidated balance sheet at December 31, 2020, as reported, includes LifeMap Sciences' consolidated assets and liabilities, after intercompany eliminations. However, LifeMap Sciences' consolidated assets and liabilities are not included in AgeX's unaudited consolidated balance sheet at December 31, 2021 due to the LifeMap Deconsolidation on March 15, 2021.

AgeX's consolidated statements of operations for the year ended December 31, 2021 include LifeMap Sciences' consolidated results for the period through March 15, 2021 rather than the day immediately preceding the LifeMap Deconsolidation due to the conversion of \$1,761,296 of LifeMap Sciences' indebtedness to AgeX into shares of LifeMap Sciences common stock on March 15, 2021 followed by the completion of the cash-out merger on the same day. For the year ended December 31, 2020, AgeX's consolidated results include LifeMap Sciences' consolidated results for the full period presented.

AgeX recognized a gain of \$106,000 from the LifeMap Deconsolidation. The sale of LifeMap Sciences was a taxable transaction to AgeX, however no income tax is due as the transaction resulted in a taxable loss primarily due to AgeX's tax basis in the subsidiary.

4. Selected Balance Sheet Components

Property and equipment, net

At December 31, 2020, property and equipment in the amount of \$381,000 were fully depreciated. No capital assets were acquired during 2021. Depreciation and amortization expenses for equipment and leasehold improvements from continuing operations amounted to \$699,000 for the year ended December 31, 2020. This included \$210,000 accelerated depreciation expense for laboratory machinery placed in storage upon lease termination as of December 31, 2020 (see Note 9).

Intangible assets, net

Intangible assets, net are primarily comprised of acquired licenses and other rights by LifeMap Sciences from a third party for certain databases it commercializes. On March 15, 2021, LifeMap Sciences was acquired by a third party in a cash-out merger (see Note 3).

On August 13, 2018, AgeX entered into an Asset Purchase Agreement (the "Purchase Agreement") with Escape Therapeutics, Inc. ("Escape") pursuant to which AgeX acquired certain patents and patent applications related primarily to methods of modifying cells and tissues and certain pluripotent stem cell lines so as to reduce their risk of being rejected when transplanted. This technology is called "UniverCyte™". AgeX paid Escape \$1,072,436 in cash and issued 80,000 shares of AgeX common stock, with an approximate value of \$240,000, for aggregate acquisition cost of \$1.3 million for the UniverCyte™ assets. The Purchase Agreement was considered an asset acquisition rather than a business combination in accordance with ASC 805-50, *Business Combinations*.

ASC 730-10-25(c), *Research and Development – Intangible Assets Purchased from Others*, provides guidance for acquisition and capitalization of the cost of intangible assets purchased from others in an asset acquisition that have alternative future uses in other research and development projects. These intangible assets are referred to as acquired in-process research and development ("IPR&D") with alternative future uses and are accounted for as intangible assets and amortized to research and development over their useful life. Acquired IPR&D in an asset acquisition that does not have any alternative future uses is expensed under the same guidance. As an initial focus, AgeX intends to use the UniverCyte™ technology in the development of its two lead products, AGEX-BAT1 and AGEX-VASC1 for the treatment of Type II diabetes and cardiovascular aging, respectively. Accordingly, AgeX recorded the UniverCyte™ technology acquired from Escape as IPR&D intangible assets with alternative future uses in accordance with ASC 730-10-25(c) and is amortizing those assets to research and development expense over their estimated 10 year useful life.

In addition to the purchase price, AgeX will pay Escape a royalty of less than 1% on net sales of products, processes and services under the acquired patents, if the assets are commercialized. Additional shares of AgeX common stock totaling up to \$4.3 million of market value will also be issued to Escape upon the attainment of development and regulatory approval milestones by AgeX for each product covered by the acquired patents. Contingent consideration in an asset acquisition is generally recorded when probable and estimable in accordance with ASC 450, *Contingencies*. Accordingly, none of the milestone payments have been accrued since the attainment of any milestone in the Purchase Agreement was not probable as of December 31, 2021.

AgeX has also agreed to engage Escape's chief executive officer as a consultant for a period of up to three years to assist AgeX in utilizing the acquired patents. AgeX paid \$200,000 per year in consulting fees as services were performed included in research and development expenses up until the agreement expired in August 2021.

AgeX estimated the future undiscounted cash flows expected to be received from the assets developed through the use of the UniverCyte™ technology when commercialized. The estimate of the future undiscounted cash flows considered AgeX's financial condition and the royalties that may become payable to Escape.

At December 31, 2021 and 2020, intangible assets, primarily consisting of acquired in-process research and development and patents, and accumulated amortization were as follows (in thousands):

	December 31,	
	2021 ⁽¹⁾	2020
Intangible assets	\$ 1,312	\$ 5,586
Accumulated amortization	(442)	(3,994)
Total intangible assets, net	<u>\$ 870</u>	<u>\$ 1,592</u>

(1) Reflects the effect of the LifeMap Deconsolidation. See Note 3.

AgeX recognized \$131,000 and \$132,000 in amortization expense of intangible assets for continuing operations, included in research and development expenses, for the years ended December 31, 2021 and 2020, respectively.

Amortization expense of intangible assets for discontinued operations for the years ended December 31, 2021 and 2020 amounted to \$89,000 and \$427,000, respectively.

Amortization of intangible assets for periods subsequent to December 31, 2021 is as follows (in thousands):

Year ending December 31,	Amortization
2022	\$ 131
2023	131
2024	131
2025	132
Thereafter	345
Total	<u>\$ 870</u>

Accounts payable and accrued liabilities

At December 31, 2021 and 2020, accounts payable and accrued liabilities were comprised of the following (in thousands):

	December 31,	
	2021 ⁽¹⁾	2020
Accounts payable	\$ 193	\$ 761
Accrued compensation	212	228
Accrued vendors and other expenses	366	667
Total accounts payable and accrued liabilities	<u>\$ 771</u>	<u>\$ 1,656</u>

(1) Reflects the effect of the LifeMap Deconsolidation. See Note 3.

5. Related Party Transactions

Transactions with Juvenescence

2019 Loan Agreement

On August 13, 2019, AgeX and Juvenescence entered into a Loan Facility Agreement (the “2019 Loan Agreement”) pursuant to which Juvenescence has provided to AgeX a \$2.0 million line of credit for a period of 18 months. On February 10, 2021, AgeX entered into an amendment (the “First Amendment”) to the 2019 Loan Agreement. The First Amendment extended the maturity date of loans under the 2019 Loan Agreement to February 14, 2022 (the “Extended Repayment Date”) and increased the amount of the loan facility by \$4.0 million. On November 8, 2021, AgeX entered into Amendment No. 2 (the “Second Amendment”) to the 2019 Loan Agreement. The Second Amendment increased the amount of the loan facility by another \$1.0 million. As of December 31, 2021, AgeX had borrowed all of the \$7.0 million total line of credit under the 2019 Loan Agreement, as amended. In lieu of accrued interest, AgeX issued to Juvenescence 19,000 shares of AgeX common stock, with an approximate value of \$56,000, concurrently with the first draw down of funds under the 2019 Loan Agreement. On February 14, 2022, AgeX refinanced the \$7.0 million outstanding principal amount of the loans and a \$160,000 origination fee due under the 2019 Loan Agreement, as amended (see Note 10).

As consideration for the line of credit under the 2019 Loan Agreement, AgeX issued to Juvenescence warrants to purchase 150,000 shares of AgeX common stock. The exercise price of the warrants is \$2.60 per share, which was the volume weighted average price on the NYSE American (VWAP) of AgeX common stock over the twenty trading days prior to the date the warrants were issued. The warrants will expire at 5:00 p.m. New York time three years after the date of issue. The number of shares issuable upon exercise of the warrants and the exercise price per share are subject to adjustment upon the occurrence of certain events such as a stock split or reverse split or combination of the common stock, stock dividend, recapitalization or reclassification of the common stock, and similar events. The estimated value of these warrants was \$236,000 which was determined in accordance with the Black-Scholes option pricing model with inputs as specified in the relevant warrant agreement.

2020 Loan Agreement

On March 30, 2020, AgeX and Juvenescence entered into a new Secured Convertible Facility Agreement (the “2020 Loan Agreement”) pursuant to which Juvenescence provided to AgeX an \$8.0 million line of credit for a period of 18 months. In lieu of accrued interest, AgeX issued to Juvenescence 28,500 shares of AgeX common stock when AgeX borrowed an aggregate of \$3 million under the 2020 Loan Agreement, and AgeX issued to Juvenescence warrants to purchase a total of 3,670,663 shares of AgeX common stock (“2020 Warrants”). The number of 2020 Warrants issued was determined by the warrant formula described below. The Repayment Date for outstanding principal balance of the loan under the 2020 Loan Agreement will be March 30, 2023. Events of Default under the 2020 Loan Agreement include: (i) AgeX fails to pay any amount in the manner and at the time provided in the 2020 Loan Agreement and the failure to pay is not remedied within 10 business days; (ii) AgeX fails to perform any of its obligations under the 2020 Loan Agreement and if the failure can be remedied it is not remedied to the satisfaction of Juvenescence within 10 business days after notice to AgeX; (iii) other indebtedness for money borrowed in excess of \$100,000 becomes due and payable or can be declared due and payable prior to its due date or if indebtedness for money borrowed in excess of \$25,000 is not paid when due; (iv) AgeX stops payment of its debts generally or discontinues its business or becomes unable to pay its debts as they become due or enters into any arrangement with creditors generally, (v) AgeX becoming insolvent or in liquidation or administration or other insolvency procedures, or a receiver, trustee or similar officer is appointed in respect of all or any part of its assets and such appointment continues undischarged or unstayed for sixty days, (vi) it becomes illegal for AgeX to perform its obligations under the 2020 Loan Agreement or any governmental permit, license, consent, exemption or similar requirement for AgeX to perform its obligations under the 2020 Loan Agreement or to carry out its business is not obtained or ceases to remain in effect; (vii) the issuance or levy of any judgment, writ, warrant of attachment or execution or similar process against all or any material part of the property or assets of AgeX if such process is not released, vacated or fully bonded within sixty calendar days after its issue or levy; (viii) any injunction, order or judgement of any court is entered or issued which in the opinion of Juvenescence materially and adversely affects the ability of AgeX to carry out its business or to pay amounts owed to Juvenescence under the 2020 Loan Agreement, (ix) there is a change in AgeX’s financial condition that in the opinion of Juvenescence materially and adversely affects, or is likely to so affect, its ability to perform any of its obligations under the 2020 Loan Agreement; (x) AgeX or a designated subsidiary sells, leases, licenses, consigns, transfers, or otherwise disposes of a material part of their assets other than inventory in the ordinary course of business or certain intercompany transactions, or certain other limited permitted transactions, unless Juvenescence approves, (xi) AgeX or a designated subsidiary contests the validity of its obligations under the 2020 Loan Agreement or other related agreement with Juvenescence, (xii) any representation, warranty, or other statement made by AgeX or a designated subsidiary under the 2020 Loan Agreement is incomplete, untrue, incorrect, or misleading, or (xiii) AgeX or a designated subsidiary suspends or ceases to carry on all or a material part of its business or threatens to do so.

Through December 31, 2021, AgeX had drawn a total of \$7.5 million against the \$8.0 million line of credit and drew the remaining \$0.5 million during January 2022. The outstanding principal balance of the loans under the 2020 Loan Agreement will become due and payable on March 30, 2023.

Under the terms of the 2020 Loan Agreement, each time AgeX received an advance of funds under the 2020 Loan Agreement, AgeX issued to Juvenescence a number of 2020 Warrants equal to 50% of the number determined by dividing the amount of the advance by the applicable Market Price. The Market Price set each New Warrant when issued was the closing price per share of AgeX common stock on the NYSE American on the date of the applicable notice from AgeX requesting a draw of funds that triggered the obligation to issue the New Warrant. The exercise price of the 2020 Warrants is the applicable Market Price. The 2020 Warrants will expire at 5:00 p.m. New York time three years after the date of issue. As of December 31, 2021 AgeX had issued to Juvenescence 2020 Warrants to purchase 3,362,098 shares of AgeX common stock. The exercise prices of the 2020 Warrants issued through December 31, 2021 range from \$0.70 per share to \$1.895 per share representing the market closing price on the NYSE American of AgeX common stock on the one day prior to delivery of the drawdown notices. The number of shares issuable upon exercise of the warrants and the exercise price per share are subject to adjustment upon the occurrence of certain events such as a stock split or reverse split or combination of the common stock, stock dividend, recapitalization or reclassification of the common stock, and similar events.

Registration Rights

AgeX entered into certain Registration Rights Agreements pursuant to which it has agreed to register for sale under the Securities Act of 1933, as amended (the “Securities Act”) all shares of AgeX common stock presently held by Juvenescence or that may be acquired by Juvenescence through the exercise of common stock purchase warrants that they hold or that they may acquire pursuant to the 2020 Loan Agreement, and shares that they may acquire through the conversion of the loans into AgeX common stock. AgeX has filed a registration statement on Form S-3, which has become effective under the Securities Act, for offerings on a delayed or continuous basis covering 16,447,500 shares of our common stock held by Juvenescence and 3,248,246 shares of AgeX common stock that may be issued upon the exercise of warrants held by Juvenescence. Juvenescence retains the right to require AgeX to register additional shares of common stock that Juvenescence may acquire through the exercise of warrants or the conversion of loans. AgeX is obligated to pay the fees and expenses of each registered offering under such registration rights agreement except for underwriting discounts and commissions. AgeX and Juvenescence will indemnify each other from certain liabilities in connection the registration, offer, and sale of securities under a registration statement, including liabilities arising under the Securities Act.

Related party payables

Since October 2018, AgeX's Chief Operating Officer ("COO"), who is also an employee of Juvenescence, has been devoting a majority of his time to AgeX's operations. AgeX reimburses Juvenescence for his services on an agreed-upon fixed annual amount of approximately \$280,000. As of December 31, 2021 and 2020, AgeX had approximately \$70,000 and \$71,000, respectively payable to Juvenescence for COO services rendered, included in related party payables, net of certain expenses owed by Juvenescence to AgeX, on the consolidated balance sheets.

6. Stockholders' Equity (Deficit)

Preferred Stock

AgeX is authorized to issue up to 5,000,000 shares of \$0.0001 par value preferred stock. At December 31, 2021 and 2020, there were no preferred shares issued and outstanding.

Common Stock

AgeX has 100,000,000 shares of \$0.0001 par value common stock authorized. The holders of AgeX's common stock are entitled to receive ratably dividends when, as, and if declared by the Board of Directors out of funds legally available. Upon liquidation, dissolution, or winding up, the holders of AgeX common stock are entitled to receive ratably the net assets available after the payment of all debts and other liabilities and subject to the prior rights of AgeX outstanding preferred shares, if any.

The holders of common stock are entitled to one vote for each share held on all matters submitted to a vote of AgeX stockholders. The holders of common stock have no preemptive, subscription, or redemption rights. The outstanding shares of common stock are fully paid and non-assessable.

As of December 31, 2021 and 2020, there were 37,941,220 and 37,691,047 shares of AgeX common stock issued and outstanding, respectively.

Issuance and Sale of Warrants by AgeX

Through December 31, 2021, as consideration for \$7.5 million in loans made to AgeX under the 2020 Loan Agreement, AgeX issued to Juvenescence warrants to purchase 3,362,098 shares of AgeX common stock. AgeX also issued 28,500 shares of AgeX common stock upon receipt of funds from the loan draw made on July 27, 2020 (see Note 5).

On August 13, 2019, in lieu of accrued interest under the 2019 Loan Agreement, AgeX issued to Juvenescence 19,000 shares of AgeX common stock concurrently with the first draw down of loan funds. Furthermore, as consideration for the line of credit under the 2019 Loan Agreement, AgeX issued to Juvenescence warrants to purchase 150,000 shares of AgeX common stock (see Note 5).

At-the-Market Offering Facility

On January 8, 2021, AgeX entered into a sales agreement with Chardan Capital Markets, LLC ("Chardan"), relating to the sale of shares of AgeX common stock, par value \$0.0001 per share, through an at-the-market ("ATM") offering as described in the prospectus supplement filed with the Form S-3 which was declared effective by the SEC on January 29, 2021. In accordance with the terms of the sales agreement, AgeX may offer and sell shares of AgeX common stock having an aggregate offering price of up to \$12.6 million from time to time through Chardan, acting as the sales agent. Through December 30, 2021, AgeX raised approximately \$496,000 in gross proceeds through the sale of shares of common stock under the ATM.

7. Stock-Based Awards

Equity Incentive Plan

Under the 2017 Equity Incentive Plan, as amended (the "Incentive Plan"), AgeX has reserved 4,500,000 shares of common stock for the grant of stock options or the sale of restricted stock ("Restricted Stock") or for the settlement of restricted stock units which are hypothetical units issued with reference to common stock ("Restricted Stock Units" or "RSUs"). AgeX may also grant stock appreciation rights ("SARs") under the Incentive Plan. The Plan also permits AgeX to issue such other securities as its Board of Directors (the "Board") or the Compensation Committee (the "Committee") administering the Incentive Plan may determine. Awards of stock options, Restricted Stock, SARs, and RSUs ("Awards") may be granted under the Incentive Plan to AgeX employees, directors, and consultants.

Awards may vest and thereby become exercisable or have restrictions on forfeiture lapse on the date of grant or in periodic installments or upon the attainment of performance goals, or upon the occurrence of specified events.

No person shall be granted, during any one year period, options to purchase, or SARs with respect to, more than 1,000,000 shares in the aggregate, or any Awards of Restricted Stock or RSUs with respect to more than 500,000 shares in the aggregate. If an Award is to be settled in cash, the number of shares on which the Award is based shall not count toward the individual share limit.

No Awards may be granted under the Incentive Plan more than ten years after the date upon which the Incentive Plan was adopted by the Board, and no options or SARs granted under the Incentive Plan may be exercised after the expiration of ten years from the date of grant.

Stock Options

Options granted under the Incentive Plan may be either “incentive stock options” within the meaning of Section 422(b) of the Internal Revenue Code of 1986, as amended (the “Code”), or “non-qualified” stock options that do not qualify incentive stock options. Incentive stock options may be granted only to AgeX employees and employees of subsidiaries. The exercise price of stock options granted under the Incentive Plan must be equal to the fair market of AgeX common stock on the date the option is granted. In the case of an optionee who, at the time of grant, owns more than 10% of the combined voting power of all classes of AgeX stock, the exercise price of any incentive stock option must be at least 110% of the fair market value of the common stock on the grant date, and the term of the option may be no longer than five years. The aggregate fair market value of common stock (determined as of the grant date of the option) with respect to which incentive stock options become exercisable for the first time by an optionee in any calendar year may not exceed \$100,000.

The exercise price of an option may be payable in cash or in common stock having a fair market value equal to the exercise price, or in a combination of cash and common stock, or other legal consideration for the issuance of stock as the Board or Committee may approve.

Generally, options will be exercisable only while the optionee remains an employee, director or consultant, or during a specific period thereafter, but in the case of the termination of an employee, director, or consultant’s services due to death or disability, the period for exercising a vested option shall be extended to the earlier of 12 months after termination or the expiration date of the option.

Restricted Stock and RSUs

In lieu of granting options, AgeX may enter into purchase agreements with employees under which they may purchase or otherwise acquire Restricted Stock or RSUs subject to such vesting, transfer, and repurchase terms, and other restrictions. The price at which Restricted Stock may be issued or sold will be not less than 100% of fair market value. Employees or consultants, but not executive officers or directors, who purchase Restricted Stock may be permitted to pay for their shares by delivering a promissory note or an installment payment agreement that may be secured by a pledge of their Restricted Stock. Restricted Stock may also be issued for services actually performed by the recipient prior to the issuance of the Restricted Stock. Unvested Restricted Stock for which AgeX has not received payment may be forfeited, or AgeX may have the right to repurchase unvested shares upon the occurrence of specified events, such as termination of employment.

Subject to the restrictions set with respect to the particular Award, a recipient of Restricted Stock generally shall have the rights and privileges of a stockholder, including the right to vote the Restricted Stock and the right to receive dividends; provided that, any cash dividends and stock dividends with respect to the Restricted Stock shall be withheld for the recipient’s account, and interest may be credited on the amount of the cash dividends withheld. The cash dividends or stock dividends so withheld and attributable to any particular share of Restricted Stock (and earnings thereon, if applicable) shall be distributed to the recipient in cash or, at the discretion of the Board or Committee, in shares of common stock having a fair market value equal to the amount of such dividends, if applicable, upon the release of restrictions on the Restricted Stock and, if the Restricted Stock is forfeited, the recipient shall have no right to the dividends.

The terms and conditions of a grant of RSUs shall be determined by the Board or Committee. No shares of common stock shall be issued at the time a RSU is granted. A recipient of RSUs shall have no voting rights with respect to the RSUs. Upon the expiration of the restrictions applicable to a RSU, AgeX will either issue to the recipient, without charge, one share of common stock per RSU or cash in an amount equal to the fair market value of one share of common stock.

At the discretion of the Board or Committee, each RSU (representing one share of common stock) may be credited with cash and stock dividends paid in respect of one share (“Dividend Equivalents”). Dividend Equivalents shall be withheld for the recipient’s account, and interest may be credited on the amount of cash Dividend Equivalents withheld. Dividend Equivalents credited to a recipient’s account and attributable to any particular RSU (and earnings thereon, if applicable) shall be distributed in cash or in shares of common stock having a fair market value equal to the amount of the Dividend Equivalents and earnings, if applicable, upon settlement of the RSU. If a RSU is forfeited, the recipient shall have no right to the related Dividend Equivalents.

SARs

A SAR is the right to receive, upon exercise, an amount payable in cash or shares, or a combination of shares and cash, equal to the number of shares subject to the SAR that is being exercised, multiplied by the excess of (a) the fair market value of a common stock on the date the SAR is exercised, over (b) the exercise price specified in the SAR Award agreement. SARs may be granted either as free standing SARs or in tandem with options. No SAR may be exercised later than 10 years after the date of grant.

The exercise price of a SAR shall not be less than 100% of the fair market value of one share of common stock on the date of grant. A SAR granted in conjunction with an option shall have the same exercise price as the related option, shall be transferable only upon the same terms and conditions as the related option, and shall be exercisable only to the same extent as the related option; provided, however, that the SAR by its terms shall be exercisable only when the fair market value per share exceeds the exercise price per share of the SAR or related option. Upon any exercise of a SAR granted in tandem with an option, the number of shares for which the related option shall be exercisable shall be reduced by the number of shares for which the SAR has been exercised. The number of shares for which a SAR issued in tandem with an option shall be exercisable shall be reduced by the number of shares for which the related option has been exercised.

Equity Incentive Plan Awards

A summary of the Incentive Plan activity and related information follows (in thousands except weighted average exercise price):

	Shares Available for Grant	Number of Options Outstanding	Number of RSUs Outstanding	Weighted Average Exercise Price
January 1, 2020	1,054	2,846	50	\$ 2.74
Options granted	(303)	303	-	0.74
Options expired/forfeited	295	(295)	-	2.89
Restricted stock units vested	-	-	(22)	-
December 31, 2020	1,046	2,854	28	2.51
Increase option pool	500	-	-	-
Options granted	(568)	568	-	1.46
Options forfeited, cancelled or expired	57	(57)	-	2.56
Restricted stock units vested	-	-	(12)	-
December 31, 2021	1,035	3,365	16	\$ 2.32
Options exercisable at December 31, 2021		2,543		\$ 2.48

There were no exercises of stock options during the years ended December 31, 2021 and 2020. Total proceeds if all options granted and outstanding as of December 31, 2021 were exercised would be approximately \$7.8 million.

At December 31, 2021, AgeX had approximately \$1.1 million of total unrecognized compensation expense related to the Incentive Plan that will be recognized over a weighted-average period of 1.75 years.

The aggregate intrinsic value of options outstanding was \$107,000 and options exercisable was \$42,000 as of December 31, 2021.

Stock-based Compensation Expense

AgeX recorded stock-based compensation expense in the following categories on the accompanying consolidated statements of operations for the years ended December 31, 2021 and 2020 (in thousands):

	Year Ended December 31,	
	2021	2020
Research and development	\$ 62	\$ 82
General and administrative	941	851
Total stock-based compensation expense	\$ 1,003	\$ 933

The weighted-average estimated fair value of stock options granted during the years ended December 31, 2021 and 2020 was \$1.15 per share and \$0.53 per share, respectively, using the Black-Scholes option pricing model with the following weighted-average assumptions:

	Year Ended December 31,	
	2021	2020
Expected life (in years)	5.71	6.08
Risk-free interest rates	0.99	0.45
Volatility	102.34%	87.86%
Dividend yield	-%	-%

The determination of stock-based compensation is inherently uncertain and subjective and involves the application of valuation models and assumptions requiring the use of judgment. If AgeX had made different assumptions, its stock-based compensation expense and net loss for the years ended December 31, 2021 and 2020 may have been significantly different. See Note 2 for a discussion of the factors used in determining these assumptions.

AgeX does not recognize deferred income taxes for incentive stock option compensation expense and records a tax deduction only when a disqualified disposition has occurred.

8. Income Taxes

Net loss from operations before income taxes are as follows:

	December 31,	
	2021	2020
Domestic	\$ (8,685)	(9,358)
Foreign	-	(1,768)
Net loss before income taxes	\$ (8,685)	(11,126)

The provision (benefit) for income taxes consisted of the following (in thousands):

	December 31,	
	2021	2020
Current tax provision (benefit):		
U.S. federal	\$ -	\$ -
State	-	-
Foreign	-	(150)
Total current provision (benefit)	-	(150)
Deferred tax provision (benefit):		
U.S. federal	-	-
State	-	-
Foreign	-	-
Total deferred provision (benefit)	-	-
Provision (benefit) for income taxes	\$ -	\$ (150)

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

The primary components of the net deferred tax assets and liabilities as of December 31, 2021 and 2020 were as follows (in thousands):

	December 31,	
	2021	2020
Deferred tax assets/(liabilities):		
Net operating loss carryforwards	\$ 12,000	\$ 13,958
Capital loss carryforwards	3,120	-
Research and development credit carryforwards	1,426	2,306
Patents and fixed assets	901	693
Stock-based compensation	690	687
Other, net	80	184
Valuation allowance	(18,217)	(17,828)
Total net deferred tax assets	\$ -	\$ -

A valuation allowance is provided when it is more likely than not that all or some portion of the deferred tax assets will not be realized. AgeX established a full valuation allowance for all periods presented due to the uncertainty of realizing future tax benefits from its net operating loss carryforwards and other deferred tax assets.

Income taxes differed from the amounts computed by applying the U.S. federal income tax rate indicated to pretax losses from operations as a result of the following:

	December 31,	
	2021	2020
Computed tax benefit at federal statutory rate	21%	21%
Research and development and other credits	1%	1%
State tax benefit, net of effect on federal income taxes	14%	2%
Permanent differences	(1)%	(2)%
Loss and deconsolidation of LifeMap	(31)%	-%
Tax effect attributable to foreign operations	-%	(2)%
Change in valuation allowance	(4)%	(19)%
	-%	1%

As of December 31, 2021, AgeX has net operating loss carryforwards of approximately \$48.6 million for U.S. federal income tax purposes. In general, NOLs and other tax credit carryforwards generated by legal entities in a consolidated federal tax group are available to other members of the tax group depending on the nature of the transaction that a member may enter into while still in the consolidated federal tax group. However, under the Tax Matters Agreement between Lineage and AgeX, any use of a member's NOLs and other tax credit carryforwards by the other member is subject to reimbursement by the benefiting member for the actual tax benefit realized. Since the August 30, 2018 deconsolidation of AgeX and to date, neither Lineage nor AgeX has used the tax attributes of the other.

On March 23, 2018, Ascendance was acquired by a third party in a merger through which AgeX received approximately \$3.2 million in cash for its shares of Ascendance common stock. For financial reporting purposes, AgeX recognized a \$3.2 million gain on the sale of its equity method investment in Ascendance. The sale was a taxable transaction to AgeX generating a taxable gain of approximately \$2.2 million. AgeX had sufficient current year losses from operations to offset the entire gain resulting in no income taxes due. At the close of the merger, \$955,000 of cash that otherwise would have been payable to the Ascendance stockholders on a pro rata basis based on share ownership was deposited into an escrow account where it was held through the term of the escrow, which expired in June 2019. The funds were held in the escrow account to cover certain potential indemnity payments and other obligations that might arise after the merger. During 2019, the escrow funds were paid to the former Ascendance stockholders and AgeX received \$354,000 as its pro rata share of the funds as additional proceeds from the sale of its Ascendance investment included in other income (expense), net, for the year ended December 31, 2019. AgeX has sufficient current year losses from operations to offset this gain resulting in no income taxes due.

As further discussed in Note 1, on August 30, 2018, Lineage consummated the sale of 14,400,000 shares of AgeX common stock to Juvenescence. AgeX received no proceeds from that transaction because the shares sold were owned by Lineage. Prior to the transaction, Juvenescence owned 5.6% of AgeX's issued and outstanding common stock. Upon completion of the transaction, Lineage's ownership in AgeX was reduced from 80.4% to 40.2% of AgeX's issued and outstanding shares of common stock, and Juvenescence's ownership in AgeX was increased from 5.6% to 45.8% of AgeX's issued and outstanding shares of common stock. Accordingly, since August 31, 2018, AgeX has not been included in Lineage's consolidated federal and state income tax returns and AgeX has filed its own, standalone income tax returns with its subsidiaries.

As of December 31, 2021, AgeX has net operating losses of approximately \$20.4 million for California purposes. As AgeX and its subsidiaries have been included in the combined California tax return with Lineage, up to the date of deconsolidation on August 30, 2018, those state net operating losses will remain with AgeX. In general, NOLs and other tax credit carryforwards generated by legal entities in a combined state tax group are available to other members of the tax group depending on the nature of the transaction that a member may enter into while still in the combined state tax group. However, under the Tax Matters Agreement between Lineage and AgeX, any use of a member's NOLs and other tax credit carryforwards by the other member is subject to reimbursement by the benefiting member for the actual tax benefit realized. Federal net operating losses generated on or prior to December 31, 2017, expire in varying amounts between 2028 and 2037, while federal net operating losses generated after December 31, 2017, carryforward indefinitely. The state net operating losses expire in varying amounts between 2028 and 2041.

As of December 31, 2021, AgeX has research and development tax credit carryforwards for federal and state tax purposes of \$0.8 million and \$0.6 million, respectively. The federal tax credits expire between 2028 and 2041, while the state tax credits have no expiration date.

As of December 31, 2021, AgeX has capital loss carryforwards for federal and state tax purposes of \$12.4 million and \$5.9 million, respectively. The federal and California capital loss carryforwards will expire in 2026.

Beginning in 2018, the 2017 Tax Act subjects a U.S. stockholder to tax on Global Intangible Low Tax Income “GILTI” earned by certain foreign subsidiaries. In general, GILTI is the excess of a U.S. stockholder’s total net foreign income over a deemed return on tangible assets. The provision further allows a deduction of 50% of GILTI, however this deduction is limited to the company’s pre-GILTI U.S. income. For the year ended December 31, 2020, AgeX’s foreign entity operated at a book loss. However, for GILTI purposes, US tax laws are applied to the foreign activity and as a result there was an immaterial amount included in income for 2020. For the year ended December 31, 2021, AgeX’s foreign entity operated at an immaterial loss; therefore, no GILTI was included in income. Current interpretations under ASC 740 state that an entity can make an accounting policy election to either recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years or to provide for the tax expense related to GILTI in the year the tax is incurred as a period expense. We have elected to account for GILTI as a current period expense when incurred.

For the year ended December 31, 2021, we experienced a domestic loss from continuing operations and a foreign loss; therefore, no income tax provision was recorded for the year ended December 31, 2021.

The sale of LifeMap Sciences was a taxable transaction to AgeX, however no income tax is due as the transaction resulted in a taxable loss primarily due to AgeX’s tax basis in the subsidiary.

Other Income Tax Matters

Internal Revenue Code Section 382 places a limitation (“Section 382 Limitation”) on the amount of taxable income that can be offset by net operating loss (“NOL”) carryforwards after a change in control (generally greater than 50% change in ownership within a three-year period) of a loss corporation. California has similar rules. Generally, after a control change, a loss corporation cannot deduct NOL carryforwards in excess of the Section 382 Limitation. Due to these “change in ownership” provisions, utilization of the NOL and tax credit carryforwards may be subject to an annual limitation regarding their utilization against taxable income in future periods.

AgeX and its subsidiaries may be subject to potential income tax examination by U.S. federal or states authorities. These potential examinations may include inquiries regarding the timing and amount of deductions, and compliance with U.S. federal and state tax laws. AgeX filed its first consolidated federal tax return in 2018. For AgeX subsidiaries that did operate and filed separate tax returns prior to 2018, those entities are not subject to tax examination by major taxing authorities for tax years before 2017. However, the taxing authorities may still make adjustments to the net operating loss and credit carryforwards used in open years by AgeX or any of its subsidiaries. Any potential examinations may include inquiries regarding the timing and amount of deductions, and compliance with U.S. federal and state tax laws.

9. Commitments and Contingencies

Lease Agreement

On April 2, 2019, the term of a sublease that AgeX entered into during March 2019 (the “AgeX Lease”) went into effect for an office and research facility (the “Alameda Facility”) comprising approximately 23,911 square feet of space in a building in an office and research park at 965 Atlantic Avenue, Alameda, California that served as AgeX’s principal offices and research laboratory.

Base monthly rent was \$35,866.50 for the initial 12 months of the sublease term and then increased to \$36,942.50. In addition, AgeX paid real property taxes, insurance and operating expenses pertaining to the building in which the Alameda Facility is located. The AgeX Lease expired on December 31, 2020.

In connection with the AgeX Lease, as of December 31, 2019 AgeX incurred \$436,000 in tenant improvement expenses that it funded and completed in November 2019. This amount was fully amortized and written off upon lease termination as of December 31, 2020.

Subleases

During 2019, AgeX, as a sublessor, entered into sublease agreements (the “AgeX Subleases”) with unrelated parties (the “Sublessees”) to lease approximately 11,121 square feet of space at AgeX’s Alameda Facility. The first Sublessee paid AgeX \$3,088.50 per month and the second Sublessee paid AgeX \$15,405.40 per month for the first twelve months of the AgeX Sublease and \$16,311.60 per month for the remaining duration of the AgeX Subleases. The AgeX Subleases expired on December 31, 2020.

Office Lease Agreement

Effective January 1, 2021, AgeX relocated its principal offices to 1101 Marina Village Parkway, Suite 201, Alameda, California following the December 31, 2020 expiration of the AgeX Lease. AgeX's new office occupies 135 square feet of leased space in a building located in an office and research park. Base monthly rent was \$947 for the first one year lease term. In September 2021, AgeX extended its office lease for another year, effective January 1, 2022, at a monthly rent of \$1,074. The lease also includes office furniture rental, janitorial services, utilities, and internet service.

ASC 842

AgeX adopted ASC 842 in 2019. AgeX recorded a right-of-use asset of \$726,000 and a right-of-use liability for the same amount for the AgeX Lease in April 2019, which is considered a noncash investing activity. The right-of-use asset and right-of-use lease liability were fully amortized and written off as of December 31, 2020 upon termination of the AgeX Lease.

There were no future minimum lease commitments as of December 31, 2021.

Litigation – General

AgeX is subject to various claims and contingencies in the ordinary course of its business, including those related to litigation, business transactions, employee-related matters, and others. When AgeX is aware of a claim or potential claim, it assesses the likelihood of any loss or exposure. If it is probable that a loss will result and the amount of the loss can be reasonably estimated, AgeX will record a liability for the loss. If the loss is not probable or the amount of the loss cannot be reasonably estimated, AgeX discloses the claim if the likelihood of a potential loss is reasonably possible and the amount involved could be material. AgeX is not aware of any claims likely to have a material adverse effect on its financial condition or results of operations.

Employment Contracts

AgeX has entered into employment contracts with certain executive officers. Under the provisions of the contracts, AgeX may be required to incur severance obligations for matters relating to changes in control, as defined, and involuntary terminations.

Indemnification

In the normal course of business, AgeX may provide indemnifications of varying scope under AgeX's agreements with other companies or consultants, typically for AgeX's pre-clinical programs. Pursuant to these agreements, AgeX will generally agree to indemnify, hold harmless, and reimburse the indemnified parties for losses and expenses suffered or incurred by the indemnified parties arising from claims of third parties in connection with AgeX's pre-clinical programs. Indemnification provisions could also cover third-party infringement claims with respect to patent rights, copyrights, or other intellectual property pertaining to AgeX's pre-clinical programs. Office and laboratory leases will also generally indemnify the lessor with respect to certain matters that may arise during the term of the lease. The sales agreement between AgeX and Chardan also includes indemnification provisions pursuant to which the parties have agreed to indemnify each other from certain liabilities that could arise from the offer and sale of AgeX common stock through the ATM facility, including liabilities under the Securities Act. Similarly, the Registration Rights Agreement between Juvenescence and AgeX includes indemnification provisions pursuant to which the parties will indemnify each other from certain liabilities in connection with the registration, offer, and sale of securities under a registration statement, including liabilities arising under the Securities Act. The term of these indemnification obligations will generally continue in effect after the termination or expiration of the particular license, lease, or agreement to which they relate. The potential future payments AgeX could be required to make under these indemnification agreements will generally not be subject to any specified maximum amount. Historically, AgeX has not been subject to any claims or demands for indemnification. AgeX also maintains various liability insurance policies that limit AgeX's financial exposure. As a result, AgeX believes the fair value of these indemnification agreements is minimal. Accordingly, AgeX has not recorded any liabilities for these agreements as of December 31, 2021 and 2020.

Paycheck Protection Program Loan

On April 13, 2020, AgeX obtained a loan in the amount of \$432,952 from Axos Bank (the "Bank") under the Paycheck Protection Program (the "PPP Loan"). The PPP Loan bore interest at a rate of 1% per annum. No payments were due on the PPP Loan during a six month deferral period commencing on the date of the promissory note. Commencing one month after the expiration of the deferral period, and continuing on the same day of each month thereafter until the maturity date of the PPP Loan, monthly payments of principal and interest became due, in an amount required to fully amortize the principal amount outstanding on the PPP Loan by the maturity date. The maturity date was April 13, 2022. The principal amount of the PPP Loan was subject to forgiveness under the PPP to the extent of PPP Loan proceeds that were used to pay expense permitted by the PPP, including payroll, rent, and utilities during the time frame permitted by the PPP. On February 19, 2021, the PPP Loan was forgiven in full.

On December 27, 2020, the Consolidated Appropriations Act of 2021 was signed into law, retroactively allowing a federal deduction of the expenses that gave rise to the PPP Loan forgiveness. California does not allow a deduction for these expenses for publicly traded companies.

Notice of Delisting

On June 1, 2020, AgeX received a letter (the “Deficiency Letter”) from the staff of the NYSE American (the “Exchange”) indicating that AgeX does not meet certain of the Exchange’s continued listing standards as set forth in Section 1003(a)(i) of the Exchange Company Guide in that AgeX has stockholders’ equity of less than \$2,000,000 and has incurred losses from continuing operations and/or net losses during its two most recent fiscal years. Pursuant to Section 1009 of the Exchange Company Guide and as provided in the Deficiency Letter AgeX provided the Exchange staff with a plan (the “Compliance Plan”) advising the Exchange staff of action AgeX has taken and will take that would bring AgeX into compliance with the Exchange’s continued listing standards by December 1, 2021. The Exchange staff accepted the Compliance Plan.

On April 15, 2021, AgeX regained compliance with all of the Exchange’s continued listing standards set forth in Part 10 of the Exchange Company Guide. Specially, the Exchange has resolved the continued listing deficiency with respect to Section 1003(a)(i) of the Exchange Company Guide. However, as a result of the subsequent decline in the market price of AgeX common stock, the total value of market capitalization or “market cap” of AgeX common stock fell below the \$50 million level that provided an exemption from meeting the stockholder’s equity requirement of the Exchange’s continued listing standards. The Exchange staff will continue to monitor AgeX’s market cap over the next few months and may take action, including truncating the compliance procedures described in Section 1009 of the Exchange Company Guide or immediately initiating delisting proceedings if we do not regain compliance.

On November 17, 2021 we received a second deficiency letter (2021 Deficiency Letter) from the staff of the Exchange indicating that AgeX does not meet certain of the Exchange’s continued listing standards as set forth in Section 1003(a)(i) and (ii) of the Exchange Company Guide in that we have stockholders equity of less than \$2,000,000 and have incurred losses from continuing operations and/or net losses during our two most recent fiscal years, and that we have stockholders equity of less than \$4,000,000 and have incurred losses from continuing operations and/or net losses during three out of four of our most recent fiscal years. Pursuant to Section 1009 of the Exchange Company Guide and as provided in the 2021 Deficiency Letter AgeX provided the Exchange staff with an updated plan (the “2021 Plan”) advising the Exchange staff of action we have taken and will take that would bring AgeX into compliance with the Exchange’s continued listing standards by June 17, 2023. We submitted the 2021 Plan on December 16, 2021 which the Exchange staff accepted. The Exchange staff will review AgeX’s compliance with the Plan on a quarterly basis and if AgeX does not show progress consistent with the 2021 Plan or is not in compliance with the Exchange’s continued listing standards by June 17, 2023, the Exchange will commence delisting procedures.

AgeX intends to make arrangements to have its common stock quoted on an interdealer quotation system if its common stock is delisted from the Exchange.

10. Subsequent Events

Additional Draws under the 2020 Loan Agreement

During January 2022, AgeX borrowed an additional \$0.5 million under the 2020 Loan Agreement with Juvenescence. The outstanding principal balance of the loans under the 2020 Loan Agreement will become due and payable on the Repayment Date on March 30, 2023.

2022 Secured Convertible Promissory Note and Security Agreement

On February 14, 2022, AgeX and Juvenescence entered into a Secured Convertible Promissory Note (the “Secured Note”) pursuant to which Juvenescence has agreed to provide to AgeX a \$13,160,000 line of credit for a period of 12 months. AgeX drew an initial \$8,160,000 of the line of credit and used \$7,160,000 to pay the outstanding principal and other amounts due as loan origination fees under its 2019 Loan Agreement with Juvenescence. The remaining \$5 million of the line of credit may be drawn down from time to time over the next 12 months subject to Juvenescence’s discretion to approve each loan draw. AgeX may not draw more than \$1 million in any subsequent single draw. The outstanding principal balance of the Secured Note will become due and payable on February 14, 2024 (the “Repayment Date”).

In lieu of accrued interest, AgeX will pay Juvenescence an Origination Fee in an amount equal to 4% of the amount each draw of loan funds, which will accrue as each draw is funded, and an additional 4% of all the total amount of funds drawn that will accrue following the end of the 12 month period during which funds may be drawn from the line of credit. The Origination Fee will become due and payable on the Repayment Date or in a pro rata amount with any prepayment of in whole or in part of the outstanding principal balance of the Secured Note.

Conversion of Loan Amounts to Common Stock

In lieu of repayment of funds borrowed, AgeX may convert the loan balance and any accrued but unpaid Origination Fees (collectively the “Outstanding Amount”) into AgeX common stock or “units” (a “Borrower Conversion”) if AgeX consummates a “Qualified Offering” which means a sale of common stock (or common stock paired with warrants or other convertible securities in “units”) in which the gross sale proceeds are at least \$10 million. The conversion price per share or units shall be the lowest price at which shares or units are sold in the Qualified Offering before deducting underwriting commissions and discounts, placement agent commissions and fees, and other expenses of the Qualified Offering. In the case of sales of shares of common stock by AgeX from time to time in an “at the market offering” a Qualified Offering shall be deemed to have occurred if and when such proceeds of the sales reaches \$10 million.

Juvenescence may convert the Outstanding Amount in whole or in part into AgeX common stock (a “Lender Conversion”) at any time at Juvenescence’s election at the closing price per share of AgeX common stock on the NYSE American or other national securities exchange on the date prior to the date Juvenescence gives AgeX notice Juvenescence’s election to convert the Outstanding Amount or a portion thereof into common stock.

Any Borrower Conversion or Lender Conversion is subject to certain restrictions to comply with applicable requirements of the NYSE American (the “Exchange”) where AgeX common stock is listed. Section 713 of the Exchange Company Guide requires listed companies to obtain stockholder approval as a prerequisite to Exchange listing approval before: (i) issuing additional shares in a transaction involving the sale, issuance, or potential issuance by the issuer of common stock (or securities convertible into common stock) equal to 20% or more of stock outstanding (determined as of the date of the particular transaction agreement) for less than the greater of book or market value of the Exchange listed common stock (the “20% Rule”) and (ii) issuing shares that will result in a change of control of the company (the “Change of Control Rule”). While the Exchange has not defined “change of control”, the Exchange considers any issuance of stock to be subject to the Change of Control Rule if the issuance of stock would result in a stockholder holding 50% or more of a company’s outstanding stock. The Secured Note contains a “19.9 % blocker” provision and a “change of control blocker” provision intended to prevent a conversion of the Outstanding Amount that would violate the 20% Rule or the Change of Control Rule.

The 19.9% blocker provides that any conversion of the Secured Note into common stock must either (i) not involve the issuance of more than 19.9% of the common stock outstanding on the date of the Secured Note at a price lower than the applicable market price (as further explained below) so that stockholder approval under the 20% Rule would not be required, or (ii) be approved by the AgeX stockholders. Under the Secured Note, AgeX may borrow funds from Juvenescence in period installments or “tranches” and the market price of AgeX common stock is determined for each such tranche. Each tranche market price is based on the closing price of AgeX common stock on the date of the drawdown notice from AgeX to Juvenescence requesting funding of the loan tranche. Upon Borrower Conversion, which can take place only in connection with a Qualified Offering by AgeX, only shares of common stock issuable upon the conversion of a tranche with a tranche market price greater than the applicable conversion price would be aggregated (along with any other common stock that might be issued to Juvenescence in connection with the Qualified Offering) for the purpose of determining the applicability of the 19.9% blocker. Upon Lender Conversion, only shares issuable upon the conversion of a tranche with a tranche market price that is lower than the market price on the date prior to the date the Juvenescence delivers a conversion notice to AgeX are aggregated for the purposes of determining the applicability of the 19.9% blocker. The change of control blocker provision provides that without the prior approval of AgeX stockholders a Borrower Conversion or a Lender Conversion may not take place if it would cause Juvenescence’s ownership to equal or exceed 50% of the outstanding shares of AgeX common stock.

Consequently, without the approval of AgeX stockholders the Outstanding Amount may not be converted into AgeX common stock under the Borrower Conversion provisions or the Lender Conversion provisions of the Secured Note in an amount that would (a) equal or exceed 19.9% of the outstanding common stock (measured at the date of the Secured Note) at a conversion price less than the greater of the book value or the applicable tranche market value of AgeX common stock, or (b) cause Juvenescence’s ownership to equal or exceed 50% of the outstanding shares of AgeX common stock.

Under the terms of the Secured Note, AgeX has agreed to seek the vote of AgeX stockholders to approve the ability of AgeX and Juvenescence to convert the Outstanding Amount into shares of AgeX common stock under the Borrower Conversion and Lender Conversion provisions of the Secured Note even if the Borrower Conversion or Lender Conversion, as applicable, would result in (a) Juvenescence receiving additional shares in excess of 19.9% of the AgeX common stock outstanding as of the date of the Secured Note for less than the greater of book value or the applicable tranche market values of AgeX common stock, or (b) Juvenescence owning more than 50% of AgeX outstanding common stock.

Default Provisions

The Outstanding Amount may become immediately due and payable prior to the Repayment Date if an Event of Default as defined in the Secured Note occurs. Events of Default under the Secured Note include: (a) AgeX fails to pay any principal amount payable by it in the manner and at the time provided under and in accordance with the Secured Note, (b) AgeX fails to pay any other amount payable by it in the manner and at the time provided under and in accordance with the Secured Note or the Security Agreement described below or any other agreement executed in connection with the Secured Note (the “Loan Documents”) and the failure is not remedied within three business days; (c) AgeX fails to perform any of its covenants or obligations or fail to satisfy any of the conditions under the Secured Note or any other Loan Document and, such failure (if capable of remedy) remains unremedied to the satisfaction of Juvenescence (in its sole discretion) for 10 business days after the earlier of (i) notice requiring its remedy has been given by Juvenescence to AgeX and (ii) actual knowledge of the failure by senior officers of AgeX; (d) if any indebtedness of AgeX in excess of \$100,000 becomes due and payable, or a breach or other circumstance arises thereunder such that Juvenescence is entitled to declare such indebtedness due and payable, prior to its due date, or any indebtedness of AgeX in excess of \$25,000 is not paid on its due date; (e) AgeX stops payment of its debts generally or ceases or threatens to cease to carry on its business or is unable to pay its debts as they fall due or is deemed by a court of competent jurisdiction to be unable to pay its debts as they fall due, or enters into any arrangements with its creditors generally; (f) if (i) an involuntary proceeding (other than a proceeding instituted by Juvenescence or an affiliate of Juvenescence) shall be commenced or an involuntary petition shall be filed seeking liquidation, reorganization or other relief in respect of AgeX and any subsidiary, or of all or a substantial part of its assets, under any federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect or (ii) an involuntary appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for AgeX or a subsidiary or for a substantial part of its assets occurs (other than in a proceeding instituted by Juvenescence or an affiliate of Juvenescence), and, in any such case, such proceeding shall continue undismissed and unstayed for sixty (60) consecutive days without having been dismissed, bonded or discharged or an order of relief is entered in any such proceeding; (g) it becomes unlawful for AgeX to perform all or any of its obligations under the Secured Note or any authorization, approval, consent, license, exemption, filing, registration or other requirement of any governmental, judicial or public body or authority necessary to enable AgeX to comply with its obligations under the Secured Note or to carry on its business is not obtained or, having been obtained, is modified in a manner that precludes AgeX or its subsidiaries from conducting their business in any material respect, or is revoked, suspended, withdrawn or withheld or fails to remain in full force and effect; (h) the issuance or levy of any judgment, writ, warrant of attachment or execution or similar process against all or any material part of the property or assets of AgeX or a subsidiary if such process is not released, vacated or fully bonded within 60 calendar days after its issue or levy; (i) any injunction, order, judgment or decision of any court is entered or issued which, in the opinion of Juvenescence, materially and adversely affects, or is reasonably likely so to affect, the ability of AgeX or a subsidiary to carry on its business or to pay amounts owed to Juvenescence under the Secured Note; (j) AgeX, whether in a single transaction or a series of related transactions, sells, leases, licenses, consigns, transfers or otherwise disposes of any material portion of its assets (with any such disposition with respect to any asset or assets with a fair value of at least \$250,000 being deemed material), other than (i) certain permitted investments (ii) sales, transfers and dispositions of inventory in the ordinary course of business, (iii) any termination of a lease of real or personal property that is not necessary in the ordinary course of the AgeX’s business, could not reasonably be expected to have a material adverse effect and does not result from AgeX’s default, and (iv) any sale, lease, license, consignment, transfer or other disposition of assets that are no longer necessary in the ordinary course of business or which has been approved in writing by Juvenescence; (k) any of the following shall occur: (i) the security and/or liens created by the Security Agreement or any other Loan Document shall at any time cease to constitute valid and perfected security and/or liens on any material portion of the collateral intended to be covered thereby; (ii) except for expiration in accordance with its terms, the Security Agreement or any other Loan Document pursuant to which a lien is granted by AgeX in favor of Juvenescence shall for whatever reason be terminated or shall cease to be in full force and effect; (iii) the enforceability of the Security Agreement or any other Loan Document pursuant to which a lien is granted by AgeX in favor of Juvenescence shall be contested by AgeX or a subsidiary, (iv) AgeX shall assert that its obligations under the Secured Note or any other Loan Document shall be invalid or unenforceable, or (v) a loss, theft, damage or destruction occurs with respect to a material portion of the collateral; (l) there is any change in the financial condition of AgeX and its subsidiaries which, in the opinion of Juvenescence, materially and adversely affects, or is reasonably likely so to affect, the ability of AgeX to perform any of its obligations under the Secured Note; and (m) any representation, warranty or statement made, repeated or deemed made or repeated by AgeX in the Secured Note, or pursuant to the Loan Documents, is incomplete, untrue, incorrect or misleading in any material respect when made, repeated or deemed made.

Restrictive Covenants

The Secured Note includes certain covenants that among other matters such as financial reporting: (i) impose financial restrictions on AgeX while the Secured Note remains unpaid, including restrictions on the incurrence of additional indebtedness by AgeX and its subsidiaries, except that AgeX’s subsidiary Reverse Bio will be permitted to incur debt convertible into equity not guaranteed or secured by the assets of AgeX or any other AgeX subsidiary, and the restrictions on the incurrence of indebtedness applicable to Reverse Bio will end if it raises more than \$15 million in debt or equity financing within 12 months from the date of the Secured Note; (ii) require that AgeX use loan proceeds and funds that may be raised through certain equity offerings only for research and development work, professional and administrative expenses, for general working capital, and for repayment of all or a portion of AgeX’s indebtedness to Juvenescence; and (iii) prohibit AgeX from making additional investments in subsidiaries, unless AgeX obtains the written consent of Juvenescence to a transaction that otherwise would be prohibited or restricted.

Security Agreement

AgeX has entered into a Security Agreement granting Juvenescence a security interest in substantially all of the assets of AgeX, including a security interest in shares of AgeX subsidiaries that hold certain assets, as collateral for AgeX’s loan obligations. If an Event of Default occurs, Juvenescence will have the right to foreclose on the assets pledged as collateral.

2022 Warrants

Upon each draw down of funds under the Secured Note, AgeX will issue to Juvenescence warrants to purchase shares of AgeX common stock (“2022 Warrants”). The 2022 Warrants will be governed by the terms of a Warrant Agreement between AgeX and Juvenescence. The number of 2022 Warrants to be issued will be equal to 50% of the number determined by dividing the amount of the applicable loan draw by the applicable Market Price. The Market Price will be the last closing price per share of AgeX common stock on the NYSE American or other national securities exchange preceding the delivery of the notice from AgeX requesting a draw of funds that triggers the obligation to issue 2022 Warrants; provided, however that if AgeX common stock is not traded on a national securities exchange the Market Price shall be determined with reference to closing prices quoted or bid and asked prices on an interdealer quotation

system averaged over twenty consecutive trading days. The exercise price of the 2022 Warrants will be the applicable Market Price. The 2022 Warrants will expire at 5:00 p.m. New York time three years after the date of issue.

The Warrant Agreement governing the 2022 Warrants contains a “change of control blocker” provision intended to prevent an exercise of 2022 Warrants that would violate the Change in Control Rule. The exercise price of the 2022 Warrants is set with reference to the market price of AgeX common stock so the 20% Rule would have no effect on the exercise of 2022 Warrants. Under the terms of the Secured Note, AgeX has agreed to seek the vote of AgeX stockholders to approve the ability of Juvenescence to exercise its 2022 Warrants if the exercise would cause Juvenescence’s ownership of AgeX common stock to equal or exceed 50% of the outstanding AgeX common stock.

Registration Rights

AgeX has entered into an amendment to its Registration Rights Agreement with Juvenescence to include as registrable securities under the Registration Rights Agreement the 2022 Warrants and underlying shares and any shares issuable upon the conversion of the Secured Note into common stock.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Previously reported.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

It is management’s responsibility to establish and maintain adequate internal control over all financial reporting pursuant to Rule 13a-15 under the Exchange Act. Our management, including our principal executive officer and our principal financial officer, have reviewed and evaluated the effectiveness of our disclosure controls and procedures as of the end of our fourth quarter. Following this review and evaluation, management collectively determined that our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act (i) is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms; and (ii) is accumulated and communicated to management, including our chief executive officer and our chief financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the fourth quarter of our fiscal year ended December 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management’s Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting, as defined in Exchange Act Rule 13a-15(f), is a process designed by, or under the supervision of, our principal executive officer, our principal operations officer, and our principal financial officer, and effected by our Board of Directors, management, and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP and includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2021, based on criteria established in the 2013 Internal Control - Integrated Framework issued by COSO. Based on this assessment, management believes that, as of that date, our internal control over financial reporting was effective.

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers, and Corporate Governance

Directors

The following table sets forth information regarding our Board of Directors as of March 14, 2022:

Name of Director	Age	Director Since	Committee Membership		
			Audit	Compensation	Nominating and Corporate Governance
<i>Non-Employee Director</i>					
Gregory H. Bailey, M.D.	66	August 2018		Chair	Member
Michael H. May, Ph.D.	53	August 2019	Chair	Member	
Joanne M. Hackett, Ph.D.	43	December 2021	Member	Member	Chair
<i>Employee Director</i>					
Michael D. West, Ph.D.	68	January 2017			

Gregory H. Bailey, M.D. Dr. Bailey is currently the Chief Executive Officer of Juvenescence Limited, a privately held company focused on the development of therapies for ageing and age-related diseases. Dr. Bailey is also a director of Manx Financial Group, PLC, BioHaven Inc., SalvaRx Inc. and Portage Biotech Inc. Dr. Bailey has founded and served as a director of a number of private and public companies and previously served as a managing partner of Palantir Group, Inc., a merchant bank involved in a number of biotech company startups and financings. Dr. Bailey practiced emergency medicine for ten years before entering finance. Dr. Bailey received his M.D. from the University of Western Ontario. We believe that Dr. Bailey is qualified to serve on our Board based on his years of experience in medicine and as an executive and in finance for the biotechnology industry.

Michael H. May, Ph.D. Dr. May is President and Chief Executive Officer of CCRM (Centre for Commercialization of Regenerative Medicine) and CEO of CCRM Enterprises Inc. and CCRM Enterprises Holdings Inc. CCRM is a public-private consortium founded under Canada’s Centres of Excellence for Commercialization and Research Program to generate sustainable health and economic benefits through global collaboration in cell and gene therapy, and regenerative medicine. Dr. May co-founded Rimon Therapeutics Ltd., a Toronto-based tissue engineering company developing novel medical polymers that possess drug-like activity, and served as President and Chief Executive Officer of Rimon from 2000 to 2006, and President and Chief Operating Officer from 2006 to 2010. Dr. May serves on a number of boards of directors and advisory committees in the field of stem cell research and regenerative medicine, including at the International Society for Cell Therapy (ISCT) and the ARM Foundation for Cell & Gene Medicine (ARMF). Dr. May completed his Ph.D. in Chemical Engineering at the University of Toronto in 1998 as an NSERC Scholar and was awarded the Martin Walmsley Fellowship for Technological Entrepreneurship. We believe that Dr. May is qualified to serve on our Board based on his years of experience in tissue engineering and the fields of stem cell research and regenerative medicine.

Joanne M. Hackett, Ph.D. Dr. Hackett is the Head of Genomic and Precision Medicine at IQVIA. IQVIA is a world leader in using data, technology, advanced analytics, and expertise to help customers drive healthcare forward. From 2017 to 2020 Dr. Hackett served as Chief Commercial Officer of Genomics England, where she engaged industry, academia and the clinical community to achieve the goal of sequencing genomes of patients and families of patients with rare diseases, and patients with common cancers. Genomics England is owned by the Department of Health and Social Care in the United Kingdom. During 2016 and 2017 Dr. Hackett served as Chief Commercial Officer and Interim Chief Executive Officer of Precision Medicine Catapult, which was established in the United Kingdom with the goal of developing, delivering and commercializing precision medicine. Dr. Hackett served as Director of Commercial Development for UCLPartners in London, England from 2013 – 2016. UCLPartners is focused on co-creating, testing and implementing innovative healthcare solutions with its academic and healthcare partners, and fostering the wider spread and adoption of those solutions. Previously, she served as Chief Operating Officer and Research Lead at Cambridge University Health Partners, and she has held other positions in the biomedical industry and in academia, including as a research scientist, and she has served on a number of advisory committees and advisory boards in the biomedical and healthcare fields. Dr. Hackett holds a Ph.D. in Molecular Genetics from the University of New Brunswick. Dr. Hackett’s years of experience in genomics and regenerative medicine with a focus on commercialization of new therapies and technologies makes her an excellent candidate to serve on our Board of Directors.

Michael D. West, Ph.D. Dr. West was appointed Chief Executive Officer of Lineage Cell Therapeutics, Inc. (formerly BioTime, Inc.) during October 2007 and then served as Co-Chief Executive Officer from October 2015 until September 2018. Dr. West also served as interim President and Chief Executive Officer of Asterias Biotherapeutics, Inc. from April 2014 to June 2014, and as Vice President of Technology Integration of Asterias until December 2015. Dr. West served as a director of: Lineage from 2002 until September 2018; Asterias from 2012 until September 2018; and OncoCyte Corporation from 2013 to 2016. Prior to becoming Chief Executive Officer of Lineage, Dr. West served as Chief Executive Officer, President, and Chief Scientific Officer of Ocata Therapeutics, Inc., a company engaged in developing human stem cell technology for use in regenerative medicine. Dr. West also founded Geron Corporation of Menlo Park, California, and from 1990 to 1998, he was a Director and Vice-President, where he initiated and managed programs in telomerase diagnostics, oligonucleotide-based telomerase inhibition as anti-tumor therapy, and the cloning and use of telomerase in telomerase-mediated therapy wherein telomerase is utilized to immortalize human cells. From 1995 to 1998 he organized and managed the research between Geron and its academic collaborators, James Thomson and John Gearhart, which led to the first isolation of human embryonic stem and human embryonic germ cells. Dr. West received a B.S. from Rensselaer Polytechnic Institute in 1976, an M.S. in Biology from Andrews University in 1982, and a Ph.D. from Baylor College of Medicine in 1989 concentrating on the biology of cellular aging. Dr. West is an internationally renowned pioneer and expert in stem cell research, and we believe that he is qualified to serve on our Board based on his years of executive experience in the fields of stem cell research and regenerative medicine.

Audit Committee

We have established an Audit Committee of the Board of Directors. The members of the Audit Committee are Michael H. May and Joanne M. Hackett, each of whom qualifies as being “independent” under Section 8.03(A) and 8.03(B) of the NYSE American Company Guide and under Rule 10A-3 of the Exchange Act. Annalisa Jenkins also served as the chair of the Audit Committee during 2021. Michael H. May is the Chair of the Audit Committee. The purpose of the Audit Committee is to recommend the engagement of our independent registered public accountants, to review their performance and the plan, scope, and results of the audit, and to review and approve the fees we pay to our independent registered public accountants. The Audit Committee also will review our accounting and financial reporting procedures and controls, and all transactions between us and our executive officers, directors, and stockholders who beneficially own 5% or more of any class of our voting securities. We have adopted a written charter for our Audit Committee which we have posted on our website at www.agexinc.com. The Board of Directors has also determined that Dr. May is “financially sophisticated” within the meaning of the rules and regulations of the NYSE American and qualifies as an “audit committee financial expert” as defined under applicable rules and regulations of the SEC and the NYSE American.

Code of Ethics

We have adopted a Code of Business Conduct and Ethics (“Code of Ethics”) that applies to our principal executive officers, our principal financial officer and accounting officer, our other executive officers, and our directors. The purpose of the Code of Ethics is to promote (i) honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships; (ii) full, fair, accurate, timely, and understandable disclosure in reports and documents that we file with or submit to the SEC and in our other public communications; (iii) compliance with applicable governmental rules and regulations; (iv) prompt internal reporting of violations of the Code of Ethics to an appropriate person or persons identified in the Code of Ethics; and (v) accountability for adherence to the Code of Ethics. A copy of our Code of Ethics has been posted on our internet website and can be found at www.agexinc.com. We intend to disclose any future amendments to certain provisions of our Code of Ethics, and any waivers of those provisions granted to our principal executive officers, principal financial officer, principal accounting officer or controller or persons performing similar functions, by posting the information on our website within four business days following the date of the amendment or waiver.

Information About Our Executive Officers

The following table sets forth information regarding our executive officers as of March 14, 2022:

Name	Age	Officer Since	Position
Michael D. West, Ph.D.	68	January 2017	Chief Executive Officer
Andrea E. Park	50	May 2020	Chief Financial Officer
Nafees N. Malik, MBChB, MPhil	44	October 2018	Chief Operating Officer
Hal Sternberg, Ph.D.	68	August 2017	Vice President of Research

For Dr. West’s biographical information see above with those of the other members of our Board of Directors.

Andrea E. Park was appointed Chief Financial Officer during May 2020, after serving as AgeX’s VP of Finance and Controller since October 2019. Ms. Park’s career spans over 24 years of public accounting and finance experience. Before joining AgeX, Ms. Park served as VP of Finance and Controller from June 2016 to September 2019 and as Corporate Controller from February 2005 to June 2016 for Lineage Cell Therapeutics, Inc. (formerly BioTime, Inc.). While at Lineage, Ms. Park was directly involved in the accounting and financial reporting of the public spin off and eventually the deconsolidation of three of its then subsidiaries including Asterias Biotherapeutics, Inc., OncoCyte Corporation and AgeX. Earlier in her career she has worked in the audit and assurance practice at Deloitte. Ms. Park is a certified public accountant with the State of California and received her B.A. in Business Economics with Concentration in Accounting from the University of California, Santa Barbara.

Nafees N. Malik, MBChB, MPhil has served as our Chief Operating Officer since October 2018, after he was appointed Head of Cell and Gene Therapy at Juvenescence Limited. Although Dr. Malik is an employee of Juvenescence, he devotes most of his time to serving as our Chief Operating Officer on a consulting basis. Dr. Malik founded and was managing director of Asklepien Consulting Limited from June 2013 where he focused on the strategic and commercial analysis of cell and gene therapies and regenerative medicine. Dr. Malik received his medical degree from the University of Liverpool and his Master of Philosophy degree in Bioscience Enterprise from the University of Cambridge.

Hal Sternberg, Ph.D. has served as our Vice President of Research since 2017. Dr. Sternberg previously served as Vice President of Research of Lineage for over 25 years and was one of Lineage co-founders. Prior to co-founding and joining Lineage, Dr. Sternberg held various positions at the University of California at Berkeley from 1982 to 1988, where he supervised a team of researchers studying Alzheimer’s Disease. Dr. Sternberg holds a M.S. in Chemistry and Ph.D. in Biochemistry from the University of Maryland.

Delinquent Section 16(a) Reports

Section 16(a) of Exchange Act requires our directors and executive officers and persons who own more than ten percent (10%) of a registered class of our equity securities (“Reporting Persons”) to file with the SEC initial reports of ownership and reports of changes in ownership of our common stock and other AgeX equity securities. Officers, directors and greater than ten percent beneficial owners are required by SEC regulations to furnish us with copies of all reports they file under Section 16(a).

To our knowledge, based solely on our review of the copies of Forms, 3 and 4 and amendments thereto filed during the last fiscal year, and Forms 5 and amendments thereto filed with respect to the last fiscal year, by the Reporting Persons, or written representation from the Reporting Persons that no Form 5 was required, all Section 16(a) filing requirements applicable to our officers, directors, and greater than ten percent beneficial owners were complied with during the fiscal year ended December 31, 2021, except that a Form 4 was filed late by Michael D. West, AgeX’s Chief Executive Officer and a member of our Board of Directors, for restricted stock units vested on September 11, 2021.

Item 11. Executive Compensation

Emerging Growth Company and Smaller Reporting Company

We are an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012 and a “smaller reporting company” as defined in the rules and regulations of the SEC. As an emerging growth company and as a smaller reporting company we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable, in general, to public companies that are not emerging growth companies or smaller reporting companies. Accordingly, this Report includes reduced disclosure about our executive compensation arrangements.

The following table shows certain information relating to the compensation of our Chief Executive Officer and the two highest paid individuals who were serving as executive officers at year end and in each case whose total compensation exceeded \$100,000 during 2021. We refer to these individuals as our “Named Executive Officers.”

Summary Compensation Table

The following table sets forth the compensation awarded to, earned by, or paid to our Named Executive Officers in respect of their service to the Company for the fiscal years ended December 31, 2021 and 2020.

Name and principal position	Year	Salary	Option Awards⁽¹⁾	All Other Compensation⁽²⁾	Total
Michael D. West	2021	\$ 546,782	\$ 137,501 ⁽³⁾	\$ 14,500	\$ 698,783
Chief Executive Officer	2020	546,782	-	14,250	561,032
Andrea E. Park	2021	266,019	85,938 ⁽⁴⁾	13,301	365,258
Chief Financial Officer	2020	264,144	160,520 ⁽⁵⁾	13,207	437,871
Nafees N. Malik ⁽⁶⁾	2021	282,272 ⁽⁷⁾	85,938 ⁽⁴⁾	-	368,210
Chief Operating Officer	2020	282,272 ⁽⁷⁾	-	-	282,272

(1) Amounts shown in this column do not reflect dollar amounts actually received by our Named Executive Officers. Instead, these amounts reflect the aggregate grant date fair value of each stock option granted, computed in accordance with the provisions of FASB ASC Topic 718, *Compensation-Stock Compensation*. We used the Black-Scholes Pricing Model to compute option fair values based on applicable exercise and stock prices, an expected option term, volatility assumptions, and risk-free interest rates. Our Named Executive Officers will only realize compensation upon exercise of the stock options and to the extent the trading price of our common stock is greater than the exercise price of such stock options at the time of exercise.

One fourth of the options will vest upon completion of 12 full months of continuous employment measured from the date of grant, and the balance of the options vest in 36 equal monthly installments commencing on the first anniversary of the date of grant, based on the completion of each month of continuous service as an employee or director of AgeX or its subsidiaries.

- (2) Amounts represent 401(k) matching contributions by us for the periods presented unless described otherwise.
- (3) Dr. West's equity awards in 2021 reflect the fair value of 120,000 stock options awarded in June 2021.
- (4) Equity awards in 2021 to Ms. Park and Dr. Malik reflect the fair value of 75,000 stock options awarded in June 2021.
- (5) Ms. Park's equity awards in 2020 reflect the fair value of 300,000 stock options awarded upon her appointment as Chief Financial Officer in May 2020. Ms. Park previously served as AgeX's VP of Finance and Controller since October 2019.
- (6) Dr. Malik serves as our Chief Operating Officer as a consultant, with his services provided by Juvenescence. Dr. Malik devotes a majority of his time to AgeX's operations and AgeX reimburses Juvenescence for his services.
- (7) Amounts represent consulting fees made to Juvenescence for Dr. Malik.

Employment Agreements and Change of Control Provisions

Michael D. West

We have entered into an employment agreement with our Chief Executive Officer Michael D. West, effective October 18, 2018 (the "West Employment Agreement"). Pursuant to the West Employment Agreement, Dr. West's annual base salary was initially set at \$525,000. Under the West Employment Agreement, Dr. West is eligible to earn an annual incentive cash bonus with a target of no less than 50% of annual base salary. Actual bonus amounts will be based on Dr. West's attainment of individual performance goals at target levels set by the Board of Directors for the applicable calendar year. If such performance goals for the applicable year are fully achieved, the Board of Directors may approve a bonus amount exceeding the target bonus level.

Under the West Employment Agreement, Dr. West has been granted options to purchase 500,000 shares of our common stock with an exercise price of \$3.00 per share, with one fourth of the options vesting following 12 full months of continuous service as an employee of AgeX, measured from the date of grant, and the balance vesting in 36 equal monthly installments commencing on the first anniversary of the date of grant, based upon the completion of each month of continuous service as an employee of AgeX. Such options expire on the earliest of (1) 10 years from the date of grant, (2) three months after Dr. West ceases to provide continuous service to us (other than due to death or disability) or (3) one year after Dr. West ceases to provide continuous service to us due to death or disability.

Under the West Employment Agreement, Dr. West has agreed to certain covenants regarding confidential information and assignment of inventions, as well as a covenant not to solicit our employees during Dr. West's employment with us and for one year thereafter. The West Employment Agreement also includes a covenant not to compete with us during his employment. In the event of Dr. West's resignation or termination from AgeX for any reason, Dr. West has agreed to promptly resign from the Board of Directors of AgeX and any of its subsidiaries.

Andrea E. Park

We have entered into an employment agreement with our Chief Financial Officer Andrea E. Park, effective May 15, 2020 (the "Park Employment Agreement"). Pursuant to the Park Employment Agreement, Ms. Park's annual base salary was initially set at \$265,000. Under the Park Employment Agreement, Ms. Park is eligible to earn an annual incentive cash bonus with a target of no less than 40% of annual base salary. Actual bonus amounts will be based on Ms. Park's attainment of individual performance goals at target levels set by the Board of Directors for the applicable calendar year. If such performance goals for the applicable year are fully achieved, the Board of Directors may approve a bonus amount exceeding the target bonus level.

Under the Park Employment Agreement, Ms. Park has been granted options to purchase 300,000 shares of our common stock with an exercise price of \$0.738 per share, with one fourth of the options vesting following 12 full months of continuous service as an employee of AgeX, measured from the date of grant, and the balance vesting in 36 equal monthly installments commencing on the first anniversary of the date of grant, based upon the completion of each month of continuous service as an employee of AgeX. Such options expire on the earliest of (1) 10 years from the date of grant, (2) three months after Ms. Park ceases to provide continuous service to us (other than due to death or disability) or (3) one year after Ms. Park ceases to provide continuous service to us due to death or disability.

Severance and Change of Control Arrangements for Dr. West and Ms. Park

Pursuant to the West Employment Agreement and Sternberg Employment Agreement, each officer is entitled to severance benefits under certain circumstances.

If we terminate Dr. West's employment without "cause" or he resigns for "good reason" at any time, he will be entitled to (1) 12 months base salary, (2) all accrued but unpaid salary earned prior to or as of the date of termination or resignation, (3) full payment of Dr. West's target bonus due for such year and (4) for a period of six months, all benefits under any health insurance plan of AgeX. In addition, if we terminate Dr. West's employment without "cause" or he resigns for "good reason," (1) all of Dr. West's outstanding equity awards that would otherwise have vested during the 12 months following termination or resignation will become fully vested and exercisable immediately and (2) with respect to any outstanding vested but unexercised options, the exercise period following termination or resignation will be extended to the earlier of the (A) 12 months after termination or (B) the natural expiration date of the applicable option. If we terminate Dr. West's employment without "cause," or he resigns for "good reason," following a "Change of Control," (1) Dr. West will be entitled to all of the benefits and payments that he would have been entitled to if his employment had been otherwise terminated without "cause" or if he resigned for "good reason," as set forth above, and (2) all of Dr. West's unvested options and restricted stock units, if any, will become fully vested and exercisable immediately. The severance compensation may be paid in a lump sum or, at our election, in installments consistent with the payment of Dr. West's salary while employed by us. In order to receive the severance benefits, Dr. West must execute a general release of all claims against us.

If we terminate Ms. Park's employment without "cause" or she resigns for "good reason" at any time, she will be entitled to (1) 9 months base salary, (2) all accrued but unpaid salary earned prior to or as of the date of termination or resignation, (3) full payment of Ms. Park's target bonus due for such year and (4) for a period of six months, all benefits under any health insurance plan of AgeX. In addition, if we terminate Ms. Park's employment without "cause" or she resigns for "good reason," (1) all of Ms. Park's outstanding equity awards that would otherwise have vested during the 12 months following termination or resignation will become fully vested and exercisable immediately and (2) with respect to any outstanding vested but unexercised options, the exercise period following termination or resignation will be extended to the earlier of the (A) 9 months after termination or (B) the natural expiration date of the applicable option. If we terminate Ms. Park's employment without "cause," or she resigns for "good reason," following a "Change of Control," (1) Ms. Park will be entitled to all of the benefits and payments that she would have been entitled to if her employment had been otherwise terminated without "cause" or if she resigned for "good reason," as set forth above, and (2) all of Ms. Park's unvested options and restricted stock units, if any, will become fully vested and exercisable immediately. The severance compensation may be paid in a lump sum or, at our election, in installments consistent with the payment of Ms. Park's salary while employed by us. In order to receive the severance benefits, Ms. Park must execute a general release of all claims against us.

"Change of Control," as defined in the West Employment Agreement means any one of the following:

- the acquisition of our voting securities by a person or an Affiliated Group entitling the holder to elect a majority of our directors, except that an increase in the amount of voting securities held by a person or Affiliated Group who on the date of the Employment Agreement beneficially owned more than 10% of our voting securities will not be a Change of Control. In addition, an acquisition of voting securities by one or more persons acting as an underwriter in connection with a sale or distribution of voting securities will not constitute a Change of Control;
- the sale of all or substantially all of our assets; or
- a merger or consolidation in which we merge or consolidate into another corporation or entity in which our stockholders immediately before the merger or consolidation do not own, in the aggregate, voting securities of the surviving corporation or entity entitling them, in the aggregate (and without regard to whether they constitute an Affiliated Group) to elect a majority of the directors or persons holding similar powers of the surviving corporation or entity.

A Change of Control will not occur if all of the persons acquiring our voting securities or assets, or merging or consolidating with us, are one or more of our direct or indirect subsidiaries or parent corporations. "Affiliated Group" means (A) a person and one or more other persons in control of, controlled by, or under common control with, such person; and (B) two or more persons who, by written agreement among them, act in concert to acquire voting securities entitling them to elect a majority of our directors.

Equity Awards Outstanding at December 31, 2021

The following table summarizes certain information concerning outstanding stock options granted by us under our 2017 Equity Incentive Plan (the “Incentive Plan”) and held by our Named Executive Officers as of December 31, 2021.

Name	Grant Date	Option Awards				Stock Awards	
		Number of Securities Underlying Unexercised Options		Option Exercise Price	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested	Market Value of Shares or Units of Stock That Have Not Vested(2)
		Exercisable(1)	Unexercisable				
Michael D. West	6/4/2021	-	120,000	\$ 1.45	6/3/2031	-	-
	3/11/2019	68,751	31,249	\$ 4.28	3/10/2029	15,625(3)	\$ 17,031
	10/18/2018	395,833	104,167	\$ 3.00	10/17/2028	-	-
	10/10/2017	660,000	-	\$ 2.00	10/9/2027	-	-
Andrea E. Park	6/4/2021	-	75,000	\$ 1.45	6/3/2031	-	-
	5/21/2020	118,750	181,250	\$ 0.738	5/20/2030	-	-
	10/1/2019	10,833	9,167	\$ 1.77	9/30/2029	-	-
Nafees N. Malik	6/4/2021	-	75,000	\$ 1.45	6/3/2031	-	-
	3/11/2019	48,125	21,875	\$ 4.28	3/10/2029	-	-
	10/18/2018	277,083	72,917	\$ 3.00	10/17/2028	-	-

- (1) The options listed are fully vested. Vesting of all options is subject to continued service as an employee, director and/or consultant of AgeX or a subsidiary on the applicable vesting date. Unless described otherwise, one fourth of the options vested or will vest on the first anniversary of the date of grant, and the remaining balance of the options vested or will vest in 36 equal monthly installments thereafter.
- (2) Value calculated based on \$1.09 closing price of AgeX common stock on the NYSE American on December 31, 2021.
- (3) Represents RSUs, which have vested or will vest according to the following schedule: 12,500 of the shares vested on March 11, 2020, and 37,500 of the shares vested or will vest in equal quarterly installments over a period of 3 years through March 11, 2023. Each RSU represents a contingent right to receive one share of AgeX common stock.

Risk Considerations and Recoupment Policies

The Compensation Committee of our Board of Directors considers, in establishing and reviewing the executive compensation program, whether the program encourages unnecessary or excessive risk taking. Most of our executive compensation arrangements include a fixed salary that provides a steady income so that executives do not feel pressured to focus exclusively on stock price performance or short term financial targets to the detriment of our long-term operational and strategic objectives. We supplement fixed salaries with discretionary bonus awards based on the executive’s performance as well as the performance of AgeX. The stock options that we have granted to our executive officers under the Incentive Plan vest over four to five years, assuring that the executives take a long-term perspective in viewing their equity ownership. Because we have not adopted compensation plans, or made incentive awards, based on quantified financial performance measures, we have not adopted specific policies regarding the adjustment or recovery of awards or payments if the relevant performance measures are restated or otherwise adjusted in a manner that would reduce the size of an award or payment. We may adopt such policies, however, if we adopt incentive compensation plans or grant incentive bonuses based on financial performance measures or if we are required to do by the rules of any national securities exchange or interdealer quotation system on which our common stock or other equity securities are listed.

Incentive Plan

The following summary of the Incentive Plan is a summary only and does not purport to include all of the terms of the Incentive Plan, and is qualified by the full terms of the Incentive Plan. The Incentive Plan permits us to grant awards (“Awards”) consisting of stock options, the grant or sale of restricted stock (“Restricted Stock”), the grant of stock appreciation rights (“SARs”), and the grant of hypothetical units issued with reference to our common stock (“RSUs”), for up to 4,500,000 shares of our common stock. Awards may be granted under the Incentive Plan to employees, directors, and consultants of AgeX and our subsidiaries, including also subsidiaries that we may form or acquire in the future. The Incentive Plan will be administered by our Board of Directors (the “Board”) or by a committee authorized by our Board (“Committee”), who will make all determinations with regard to the grant and terms of Awards, subject to the terms of the Incentive Plan.

Awards may vest and thereby become exercisable or have restrictions on forfeiture lapse on the date of grant or in periodic installments or upon the attainment of performance goals, or upon the occurrence of specified events as determined by the Board or the Committee. The Board or Committee, in its discretion, may accelerate the vesting of an Award after the date of grant.

No person shall be granted, during any one year period, options to purchase, or SARs with respect to, more than 1,000,000 shares in the aggregate, or any Awards of Restricted Stock or RSUs with respect to more than 500,000 shares in the aggregate. If an Award is to be settled in cash, the number of shares on which the Award is based shall not count toward the individual share limit.

No Awards may be granted under the Incentive Plan more than ten years after the date upon which the Incentive Plan was adopted by the Board, and no options or SARS granted under the Incentive Plan may be exercised after the expiration of ten years from the date of grant.

Stock Options

Options granted under the Incentive Plan may be either “incentive stock options” within the meaning of Section 422(b) of the Internal Revenue Code of 1986, as amended, or the Code, or “non-qualified” stock options that do not qualify incentive stock options. Incentive stock options may be granted only to employees of AgeX and its subsidiaries. The exercise price of stock options granted under the Incentive Plan must be equal to the fair market of our common stock on the date the option is granted. In the case of an optionee who, at the time of grant, owns more than 10% of the combined voting power of all classes of our stock, the exercise price of any incentive stock option must be at least 110% of the fair market value of our common stock on the grant date, and the term of the option may be no longer than five years. The aggregate fair market value of common stock (determined as of the grant date of the option) with respect to which incentive stock options become exercisable for the first time by an optionee in any calendar year may not exceed \$100,000.

The exercise price of an option may be payable in cash or in shares of our common stock having a fair market value equal to the exercise price, or in a combination of cash and common stock, or other legal consideration for the issuance of stock as the Board or Committee may approve.

Generally, options will be exercisable only while the optionee remains an employee, director or consultant, or during a specific period thereafter as approved by the Board or Committee, which will generally be three months, but in the case of the termination of an employee, director, or consultant’s services due to death or disability, the period for exercising a vested option shall be extended to the earlier of 12 months after termination or the expiration date of the option.

The number of shares covered by the Incentive Plan, and the number of shares and the exercise price per share of each outstanding option, shall be proportionately adjusted for any increase or decrease in the number of issued and outstanding shares of common stock resulting from a subdivision or consolidation of shares or the payment of a stock dividend, or any other increase or decrease in the number of issued and outstanding shares of common stock effected without receipt of consideration by us.

Restricted Stock and RSUs

In lieu of granting options, we may enter into purchase agreements with employees under which they may purchase or otherwise acquire Restricted Stock or RSUs subject to such vesting, transfer, and repurchase terms and restrictions as the Board or Committee may determine. We may permit employees or consultants who purchase Restricted Stock to pay for their shares by delivering a promissory note or an installment payment agreement that may be secured by a pledge of their Restricted Stock. We may also issue Restricted Stock for services actually performed by the recipient prior to the issuance of the Restricted Stock.

The Board or Committee may require that Restricted Stock shall be held by us or in escrow pending the expiration or release of the applicable restrictions. Unvested Restricted Stock for which we have not received payment may be forfeited to us, or we may have the right to repurchase unvested shares upon the occurrence of specified events, such as termination of employment.

Subject to the restrictions set by the Board or Committee, a recipient of Restricted Stock generally shall have the rights and privileges of a stockholder, including the right to vote the Restricted Stock and the right to receive dividends; provided that, any cash dividends and stock dividends with respect to the Restricted Stock shall be withheld by us for the recipient’s account, and interest may be credited on the amount of the cash dividends withheld at a rate and subject to such terms as determined by the Board or Committee. The cash dividends or stock dividends so withheld and attributable to any particular share of Restricted Stock (and earnings thereon, if applicable) shall be distributed to the recipient in cash or, at the discretion of the Board or Committee, in common stock having a fair market value equal to the amount of such dividends, if applicable, upon the release of restrictions on the Restricted Stock and, if the Restricted Stock is forfeited, the recipient shall have no right to the dividends.

The terms and conditions of a grant of RSUs shall be determined by the Board or Committee. No common stock shall be issued at the time a RSU is granted, and we will not be required to set aside a fund for the payment of any such award. A recipient of RSUs shall have no voting rights with respect to the RSUs. Upon the expiration of the restrictions applicable to a RSU, we will either issue to the recipient, without charge, one share of common stock per RSU or cash in an amount equal to the fair market value of one share of common stock.

At the discretion of the Board or Committee, each RSU (representing one share of common stock) may be credited with cash and stock dividends paid in respect of one share (“Dividend Equivalents”). Dividend Equivalents shall be withheld by us for the recipient’s account, and interest may be credited on the amount of cash Dividend Equivalents withheld at a rate and subject to such terms as determined by the Board or Committee. Dividend Equivalents credited to a recipient’s account and attributable to any particular RSU (and earnings thereon, if applicable) shall be distributed in cash or, at the discretion of the Board or Committee, in common stock having a fair market value equal to the amount of the Dividend Equivalents and earnings, if applicable, upon settlement of the RSU. If a RSU is forfeited, the recipient shall have no right to the related Dividend Equivalents.

SARs

An SAR is the right to receive, upon exercise, an amount payable in cash or shares or a combination of shares and cash, as determined by the Board or Committee, equal to the number of shares subject to the SAR that is being exercised, multiplied by the excess of (a) the fair market value of a share of common stock on the date the SAR is exercised, over (b) the exercise price specified in the SAR Award agreement. SARs may be granted either as free standing SARs or in tandem with options, and with such terms and conditions as the Board or Committee may determine. No SAR may be exercised later than 10 years after the date of grant.

The exercise price of an SAR will be determined by the Board or Committee, but shall not be less than 100% of the fair market value of one share of common stock on the date of grant. An SAR granted in conjunction with an option shall have the same exercise price as the related option, shall be transferable only upon the same terms and conditions as the related option, and shall be exercisable only to the same extent as the related option; provided, however, that the SAR by its terms shall be exercisable only when the fair market value per share exceeds the exercise price per share of the SAR or related option. Upon any exercise of an SAR granted in tandem with an option, the number of shares for which the related option shall be exercisable shall be reduced by the number of shares for which the SAR has been exercised. The number of shares for which an SAR issued in tandem with an option shall be exercisable shall be reduced by the number of shares for which the related option has been exercised.

Withholding

To the extent provided by the terms of an Award Agreement or as may be approved by the AgeX Board or Committee, an optionee or recipient of a Restricted Stock or RSU Award or SAR may satisfy any federal, state or local tax withholding obligation relating to the Award by any of the following means (in addition to our right to withhold from any compensation paid to the Award recipient) or by a combination of such means: (a) tendering a cash payment; (b) authorizing us to withhold shares of common stock from the shares otherwise issuable to the recipient as a result of the exercise or acquisition of shares under the Award, provided, however, that no shares are withheld with a value exceeding the minimum amount of tax required to be withheld by law; or (c) delivering to us previously owned and unencumbered shares of our common stock.

Changes in Shares Under the Incentive Plan

In the event of changes in the outstanding common stock or in our capital structure by reason of any stock or extraordinary cash dividend, stock split, reverse stock split, an extraordinary corporate transaction such as any recapitalization, reorganization, merger, consolidation, combination, exchange, or other relevant change in capitalization, the terms of Awards granted under the Incentive Plan, and the maximum number of shares subject to all Awards under the Incentive Plan or with respect to which any one person may be granted Awards during any one year period, will be equitably adjusted or substituted, as to the number, price or kind of shares or other consideration subject to the Awards to the extent necessary to preserve the economic intent of the Awards. In making such adjustments, the Board or Committee shall generally ensure that the adjustments will not constitute a modification, extension or renewal of an incentive stock option within the meaning of Section 424(h)(3) of the Code, and in the case of non-qualified options, ensure that any adjustments will not constitute a modification of such non-qualified options within the meaning of Section 409A of the Code, and that adjustments or substitutions of Awards intended to qualify as “performance-based compensation” under Section 162(m) of the Code will not cause us to be denied a tax deduction on account of Section 162(m) of the Code.

Restrictions on Transfers of Options

Under the Incentive Plan, stock options may be transferred to a limited class of defined “Permitted Transferees,” such as the option holder’s immediate family members, family trusts and family controlled companies. In addition, options may be transferred to a securities broker/dealer to exercise the options on the option holder’s behalf as a means of the option holder obtaining the funds needed to exercise the option, provided that the fair market value of the shares being acquired exceeded the exercise price of the option at the close of the market on the trading day preceding the exercise date.

Repricing Prohibition

The Plan prohibits any modification of the purchase price or exercise price of an outstanding option or other Award if the change would effect a “repricing” without stockholder approval. As defined in the Incentive Plan, “repricing” means a reduction in the exercise price of an outstanding option or SAR or cancellation of an “underwater” or “out-of-the-money” Award in exchange for other Awards or cash. An “underwater” or “out-of-the-money” Award is defined to mean an Award for which the exercise price is less than the “fair market value” of our common stock. The fair market value will generally be determined by the AgeX Board, but if our common stock becomes publicly traded, the fair market value will be the closing price of the common stock on a national securities exchange or inter-dealer quotation system on which the common stock is traded.

Limitation on Share Recycling

Shares subject to an Award shall not again be made available for issuance or delivery under the Incentive Plan if those shares are (a) shares tendered in payment of an option, (b) shares delivered or withheld by us to satisfy any tax withholding obligation, (c) shares covered by a stock-settled SAR or other Award that were not issued upon the settlement of the Award, or (d) shares repurchased by us using the proceeds from option exercises. Only shares subject to an Award that is cancelled or forfeited or expires prior to exercise or realization may be regranted under the Incentive Plan.

The foregoing description of the Incentive Plan is qualified in its entirety by reference to the Incentive Plan, a copy of which is filed as an Exhibit to our Registration Statement on Form 10 and is incorporated herein by reference.

Other Compensation Plans

We do not have any pension plans, defined benefit plans, or non-qualified deferred compensation plans. We may make contributions to 401(k) plan accounts for participating executive officers and other employees.

Non-Employee Director Compensation

Directors and members of committees of the Board of Directors who are our employees are entitled to receive compensation as employees but are not compensated for serving as directors or attending meetings of the Board or committees of the Board. All directors are entitled to reimbursements for their out-of-pocket expenses incurred in attending meetings of the Board or committees of the Board.

The following table summarizes certain information concerning the compensation paid during the past fiscal year to each of the persons who served as directors during the year ended December 31, 2021 and who were not our employees on the date the compensation was earned.

Name	Fees Earned or Paid in Cash	Option Awards ⁽¹⁾	All Other Compensation	Total
Gregory H. Bailey	\$ 60,000	\$ 74,524	\$ -	\$ 134,524
Annalisa Jenkins ⁽²⁾	\$ 50,000	\$ 74,524	\$ -	\$ 124,524
Michael H. May	\$ 40,000	\$ 114,653	\$ -	\$ 154,653
Joanne M. Hackett ⁽³⁾	\$ -	\$ -	\$ -	\$ -

(1) In accordance with SEC rules, the amounts shown reflect the aggregate grant date fair value of stock awards granted to Non-Employee Directors during 2021, computed in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718 (“FASB ASC 718”). The grant date fair value for the stock options is measured based on the closing price of AgeX’s common stock on the date of grant. See Note 7 to our consolidated financial statements included in this Report for details as to the assumptions used to determine the fair value of the awards.

Each Non-Employee Director who was serving on our Board of Directors on June 21, 2021 received an Annual Director Award of 65,000 stock options, and the grant date fair value for each stock option was \$74,524. Those options will vest and become exercisable in equal quarterly installments over a one-year period from the date of grant.

On the same date, Dr. May received a special award of 35,000 stock options vesting on the date of grant for his service as the sole member of the Special Committee considering a certain proposed merger transaction.

As of December 31, 2021, Dr. Bailey held 165,000 stock options and Dr. May held 126,534 stock options.

(2) Dr. Jenkins’ term as a director expired on December 29, 2021. On that date, 16,250 unvested stock options were immediately forfeited, and 148,750 stock options were vested and will expire if not exercised within 90 days from the date her term as director expired.

(3) Dr. Hackett was elected as a director on December 29, 2021. No stock option or other equity awards were granted to her as of December 31, 2021.

Item 12. Security Ownership of Certain Beneficial Owners and Management, and Related Stockholder Matters

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information regarding the beneficial ownership of our common stock as of March 14, 2022, by (i) each of our named executive officers, (ii) each of our directors, (iii) all of our directors and executive officers as a group; and (iv) each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock. Our calculation of the percentage of beneficial ownership is based on 37,943,064 shares of common stock outstanding as of March 14, 2022.

Beneficial ownership is determined according to the rules of the SEC and generally means that a person has beneficial ownership of a security if he, she or it possesses sole or shared voting or investment power of that security, including options that are currently exercisable or exercisable within 60 days of March 14, 2022, and restricted stock units that will vest within 60 days of March 14, 2022. Shares of our common stock issuable pursuant to stock options and restricted stock units currently exercisable or exercisable within 60 days of March 14, 2022, and restricted stock units that will vest within 60 days of March 14, 2022, are deemed outstanding for computing the percentage of the person holding such equity awards and the percentage of any group of which the person is a member but are not deemed outstanding for computing the percentage of any other person. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons named in the table below have sole voting and investment power with respect to all shares they beneficially own, subject to community property laws where applicable. The information does not necessarily indicate beneficial ownership for any other purpose, including for purposes of Section 16 of the Exchange Act.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned
5% Stockholders		
Juvenescence Limited ⁽¹⁾	48,871,797	69.45%
Entities affiliated with Broadwood Partners, L.P. ⁽²⁾	3,003,446	7.92%
Named Executive Officers and Directors		
Michael D. West ⁽³⁾	1,217,080	3.11%
Andrea E. Park ⁽⁴⁾	157,017	*
Nafees N. Malik ⁽⁵⁾	361,665	*
Gregory H. Bailey ⁽⁶⁾	165,000	*
Michael H. May ⁽⁶⁾	126,534	*
Joanne M. Hackett ⁽⁷⁾	16,250	*
All executive officers and directors as a group (7 persons) ⁽⁸⁾	2,105,554	5.26%

* Less than 1%

- (1) Includes 9,051,431 shares that may be acquired upon the exercise of common stock purchase warrants and additional 23,372,866 shares that may be acquired through the conversion of the current amounts outstanding under the Loan Agreements into shares of AgeX common stock at an assumed conversion price of \$0.6914 per share based on the closing price of AgeX common stock on the NYSE American on February 14, 2022, but subject to the “19.9% Cap” and the “50% Cap” provisions of the 2022 Secured Convertible Promissory Note Agreement discussed in Item 13 below under “Certain Relationships and Related Transactions, and Director Independence — 2022 Secured Convertible Promissory Note and Warrant Agreement” limiting the loan amount that can be converted into AgeX common stock without stockholder approval. The address of Juvenescence is 18 Athol Street, Douglas, Isle of Man IM1 1JA. The foregoing information is based solely on a Schedule 13D/A filed with the SEC on February 22, 2022, which provides information only as of on February 14, 2022.
- (2) Includes 2,997,156 shares owned by Broadwood Partners, L.P. and 6,290 shares owned by Neal Bradsher. Broadwood Capital, Inc. is the general partner of Broadwood Partners, L.P. Neal Bradsher is the President of Broadwood Capital, Inc. Mr. Bradsher and Broadwood Capital, Inc. have disclaimed beneficial ownership of the shares owned by Broadwood Partners, L.P. except to the extent of their respective pecuniary interests in such shares. The address of these entities is 142 West 57th Street, 11th Floor, New York, NY 10019. The foregoing information is based solely on a Schedule 13G filed with the SEC on December 10, 2018, which provides information only as of November 28, 2018. Consequently, the beneficial ownership of these reporting entities or person may have changed between November 28, 2018 and March 14, 2022.
- (3) Includes 1,176,665 shares that may be acquired upon the exercise of certain stock options that are presently exercisable or that will become exercisable within 60 days. Excludes 203,335 shares that may be acquired upon the exercise of certain stock options that are not presently exercisable and that will not become exercisable within 60 days, and 12,500 RSUs that are not presently vested and will not vest within 60 days.
- (4) Includes 156,666 shares of common stock that may be acquired upon the exercise of certain stock options that are presently exercisable or that will become exercisable within 60 days. Excludes 238,334 shares that may be acquired upon the exercise of certain stock options that are not presently exercisable and that will not become exercisable within 60 days.
- (5) Consists entirely shares of common stock that may be acquired upon the exercise of certain stock options that are presently exercisable or that will become exercisable within 60 days. Excludes 133,335 shares that may be acquired upon the exercise of certain stock options that are not presently exercisable and that will not become exercisable within 60 days.

- (6) Consists entirely shares of common stock that may be acquired upon the exercise of certain stock options that are presently exercisable or that will become exercisable within 60 days.
- (7) Consists entirely shares of common stock that may be acquired upon the exercise of certain stock options that will become exercisable within 60 days. Excludes 48,750 shares that may be acquired upon the exercise of certain stock options that are not presently exercisable and that will not become exercisable within 60 days.
- (8) Includes 2,064,655 shares that may be acquired upon the exercise of certain stock options that are presently exercisable or that will become exercisable within 60 days. Excludes 631,879 shares that may be acquired upon the exercise of certain stock options that are not presently exercisable and that will not become exercisable within 60 days and 12,500 RSUs that are not presently vested and will not vest within 60 days.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Sales of Warrants

During 2018, we sold warrants to purchase 2,000,000 shares of common stock for \$0.50 per warrant for aggregate cash proceeds of \$1,000,000 to certain investors. The warrants entitled the warrant holders to purchase shares of our common stock for \$2.50 per share. John Mauldin who later became a member of our Board of Directors purchased warrants entitling him to purchase 50,000 shares of AgeX common stock, on the same terms as the other investors.

Compensation of Our Chief Operating Officer

Since October 2018, AgeX's Chief Operating Officer, Nafees N. Malik, who is an employee of Juvenescence, has been devoting a majority of his time to AgeX's operations for which AgeX reimburses Juvenescence for his services on an agreed upon fixed annual rate of \$272,000 from October 18, 2018 through March 10, 2019 and \$283,000 from March 11, 2019 through December 31, 2020. Additionally, Dr. Malik received a \$50,000 bonus in March 2019. As of December 31, 2021 AgeX had accrued approximately \$71,000 payable to Juvenescence for Dr. Malik's services rendered.

2019 Loan Facility Agreement and Warrant Agreement

On August 13, 2019, AgeX and Juvenescence entered into a Loan Facility Agreement (the "2019 Loan Agreement") pursuant to which Juvenescence has provided to AgeX a \$2.0 million line of credit for a period of 18 months. On February 10, 2021, AgeX entered into an amendment (the "First Amendment") to the 2019 Loan Agreement. The First Amendment extended the maturity date of loans under the 2019 Loan Agreement to February 14, 2022 (the "Extended Repayment Date") and increased the amount of the loan facility by \$4.0 million. The amount of the loan facility was increased by an additional \$1.0 million by a second amendment to the 2019 Loan Agreement during November 2021. In lieu of accrued interest, AgeX issued to Juvenescence 19,000 shares of AgeX common stock, with an approximate value of \$56,000, concurrently with the first draw down of funds under the 2019 Loan Agreement. As of December 31, 2021 AgeX had borrowed all of the \$7.0 million total line of credit under the 2019 Loan Agreement, as amended. The \$7.0 million outstanding principal balance and a \$160,000 loan origination fee were paid in full on February 14, 2022 when AgeX entered into a Secured Convertible Promissory Note with Juvenescence as described below.

As consideration for the line of credit under the 2019 Loan Agreement, AgeX issued to Juvenescence warrants to purchase 150,000 shares of AgeX common stock. The exercise price of the warrants is \$2.60 per share, which was the volume weighted average price on the NYSE American (VWAP) of AgeX common stock over the twenty trading days prior to the date the warrants were issued. The warrants will expire at 5:00 p.m. New York time three years after the date of issue. The number of shares issuable upon exercise of the warrants and the exercise price per share are subject to adjustment upon the occurrence of certain events such as a stock split or reverse split or combination of the common stock, stock dividend, recapitalization or reclassification of the common stock, and similar events. The estimated value of these warrants was \$236,000 which was determined in accordance with the Black-Scholes option pricing model with inputs as specified in the relevant warrant agreement.

2020 Loan Agreement and New Warrant Agreement

On March 30, 2020, AgeX and Juvenescence entered into a new Secured Convertible Facility Agreement (the "2020 Loan Agreement") pursuant to which Juvenescence has agreed to provide to AgeX an \$8.0 million line of credit for a period of 18 months. AgeX has borrowed the full \$8 million line of credit under the 2020 Loan Agreement. The outstanding principal balance of the loan under the 2020 Loan Agreement will become due and payable on March 30, 2023.

Events of Default under the 2020 Loan Agreement include: (i) AgeX fails to pay any amount in the manner and at the time provided in the 2020 Loan Agreement and the failure to pay is not remedied within 10 business days; (ii) AgeX fails to perform any of its obligations under the 2020 Loan Agreement and if the failure can be remedied it is not remedied to the satisfaction of Juvenescence within 10 business days after notice to AgeX; (iii) other indebtedness for money borrowed in excess of \$100,000 becomes due and payable or can be declared due and payable prior to its due date or if indebtedness for money borrowed in excess of \$25,000 is not paid when due; (iv) AgeX stops payment of its debts generally or discontinues its business or becomes unable to pay its debts as they become due or enters into any arrangement with creditors generally, (v) AgeX becoming insolvent or in liquidation or administration or other insolvency procedures, or a receiver, trustee or similar officer is appointed in respect of all or any part of its assets and such appointment continues undischarged or unstayed for sixty days, (vi) it becomes illegal for AgeX to perform its obligations under the 2020 Loan Agreement or any governmental permit, license, consent, exemption or similar requirement for AgeX to perform its obligations under the 2020 Loan Agreement or to carry out its business is not obtained or ceases to remain in effect; (vii) the issuance or levy of any judgment, writ, warrant of attachment or execution or similar process against all or any material part of the property or assets of AgeX if such process is not released, vacated or fully bonded within sixty calendar days after its issue or levy; (viii) any injunction, order or judgement of any court is entered or issued which in the opinion of Juvenescence materially and adversely affects the ability of AgeX to carry out its business or to pay amounts owed to Juvenescence under the 2020 Loan Agreement, (ix) there is a change in AgeX's financial condition that in the opinion of Juvenescence materially and adversely affects, or is likely to so affect, its ability to perform any of its obligations under the 2020 Loan Agreement; (x) AgeX or a designated subsidiary sells, leases, licenses, consigns, transfers, or otherwise disposes of a material part of their assets other than inventory in the ordinary course of business or certain intercompany transactions, or certain other limited permitted transactions, unless Juvenescence approves, (xi) AgeX or a designated subsidiary contests the validity of its obligations under the 2020 Loan Agreement or other related agreement with Juvenescence, (xii) any representation, warranty, or other statement made by AgeX or a designated subsidiary under the 2020 Loan Agreement is incomplete, untrue, incorrect, or misleading, or (xiii) AgeX or a designated subsidiary suspends or ceases to carry on all or a material part of its business or threatens to do so.

Under the terms of the 2020 Loan Agreement, each time AgeX received an advance of funds under the 2020 Loan Agreement, AgeX issued to Juvenescence a number of 2020 Warrants equal to 50% of the number determined by dividing the amount of the advance by the applicable Market Price. The Market Price set each New Warrant when issued was the closing price per share of AgeX common stock on the NYSE American on the date of the applicable notice from AgeX requesting a draw of funds that triggered the obligation to issue the New Warrant. The exercise price of the 2020 Warrants is the applicable Market Price. The 2020 Warrants will expire at 5:00 p.m. New York time three years after the date of issue. As of March 14, 2022, AgeX had issued to Juvenescence 2020 Warrants to purchase 3,670,663 shares of AgeX common stock. The exercise prices of the 2020 Warrants range from \$0.70 per share to \$1.895 per share representing the market closing price on the NYSE American of AgeX common stock on the one day prior to delivery of the drawdown notices. The number of shares issuable upon exercise of the warrants and the exercise price per share are subject to adjustment upon the occurrence of certain events such as a stock split or reverse split or combination of the common stock, stock dividend, recapitalization or reclassification of the common stock, and similar events.

2022 Secured Convertible Promissory Note and 2022 Warrant Agreement

On February 14, 2022, AgeX and Juvenescence entered into the Secured Note pursuant to which Juvenescence has agreed to provide to AgeX a \$13,160,000 line of credit for a period of 12 months. AgeX drew an initial \$8,160,000 of the line of credit and used \$7,160,000 to pay the outstanding principal and other amounts due as loan origination fees under its 2019 Loan Agreement with Juvenescence. The remaining \$5 million of the line of credit may be drawn down from time to time over the next 12 months subject to Juvenescence's discretion to approve each loan draw. AgeX may not draw more than \$1 million in any subsequent single draw. The outstanding principal balance of the Secured Note will become due and payable on February 14, 2024 (the "Repayment Date").

In lieu of accrued interest, AgeX will pay Juvenescence an Origination Fee in an amount equal to 4% of the amount each draw of loan funds, which will accrue as each draw is funded, and an additional 4% of all the total amount of funds drawn that will accrue following the end of the 12 month period during which funds may be drawn from the line of credit. The Origination Fee will become due and payable on the Repayment Date or in a pro rata amount with any prepayment of in whole or in part of the outstanding principal balance of the Secured Note.

Conversion of Loan Amounts to Common Stock: In lieu of repayment of funds borrowed, AgeX may convert the loan balance and any accrued but unpaid Origination Fees (collectively the "Outstanding Amount") into AgeX common stock or "units" (a "Borrower Conversion") if AgeX consummates a "Qualified Offering" which means a sale of common stock (or common stock paired with warrants or other convertible securities in "units") in which the gross sale proceeds are at least \$10 million. The conversion price per share or units shall be the lowest price at which shares or units are sold in the Qualified Offering before deducting underwriting commissions and discounts, placement agent commissions and fees, and other expenses of the Qualified Offering. In the case of sales of shares of common stock by AgeX from time to time in an "at the market offering" a Qualified Offering shall be deemed to have occurred if and when such proceeds of the sales reaches \$10 million.

Juvenescence may convert the Outstanding Amount in whole or in part into AgeX common stock (a "Lender Conversion") at any time at Juvenescence's election at the closing price per share of AgeX common stock on the NYSE American or other national securities exchange on the date prior to the date Juvenescence gives AgeX notice Juvenescence's election to convert the Outstanding Amount or a portion thereof into common stock.

Any Borrower Conversion or Lender Conversion is subject to certain restrictions to comply with applicable requirements of the NYSE American (the "Exchange") where AgeX common stock is listed. Section 713 of the Exchange Company Guide requires listed companies to obtain stockholder approval as a prerequisite to Exchange listing approval before: (i) issuing additional shares in a transaction involving the sale, issuance, or potential issuance by the issuer of common stock (or securities convertible into common stock) equal to 20% or more of stock outstanding (determined as of the date of the particular transaction agreement) for less than the greater of book or market value of the Exchange listed common stock (the "20% Rule") and (ii) issuing shares that will result in a change of control of the company (the "Change of Control Rule"). While the Exchange has not defined "change of control", the Exchange considers any issuance of stock to be subject to the Change of Control Rule if the issuance of stock would result in a stockholder holding 50% or more of a company's outstanding stock. The Secured Note contains a "19.9 % blocker" provision and a "change of control blocker" provision intended to prevent a conversion of the Outstanding Amount that would violate the 20% Rule or the Change of Control Rule.



The 19.9% blocker provides that any conversion of the Secured Note into common stock must either (i) not involve the issuance of more than 19.9% of the common stock outstanding on the date of the Secured Note at a price lower than the applicable market price (as further explained below) so that stockholder approval under the 20% Rule would not be required, or (ii) be approved by the AgeX stockholders. Under the Secured Note, AgeX may borrow funds from Juvenescence in period installments or “tranches” and the market price of AgeX common stock is determined for each such tranche. Each tranche market price is based on the closing price of AgeX common stock on the date of the drawdown notice from AgeX to Juvenescence requesting funding of the loan tranche. Upon Borrower Conversion, which can take place only in connection with a Qualified Offering by AgeX, only shares of common stock issuable upon the conversion of a tranche with a tranche market price greater than the applicable conversion price would be aggregated (along with any other common stock that might be issued to Juvenescence in connection with the Qualified Offering) for the purpose of determining the applicability of the 19.9% blocker. Upon Lender Conversion, only shares issuable upon the conversion of a tranche with a tranche market price that is lower than the market price on the date prior to the date the Juvenescence delivers a conversion notice to AgeX are aggregated for the purposes of determining the applicability of the 19.9% blocker. The change of control blocker provision provides that without the prior approval of AgeX stockholders a Borrower Conversion or a Lender Conversion may not take place if it would cause Juvenescence’s ownership to equal or exceed 50% of the outstanding shares of AgeX common stock.

Consequently, without the approval of AgeX stockholders the Outstanding Amount may not be converted into AgeX common stock under the Borrower Conversion provisions or the Lender Conversion provisions of the Secured Note in an amount that would (a) equal or exceed 19.9% of the outstanding common stock (measured at the date of the Secured Note) at a conversion price less than the greater of the book value or the applicable tranche market value of AgeX common stock, or (b) cause Juvenescence’s ownership to equal or exceed 50% of the outstanding shares of AgeX common stock.

Under the terms of the Secured Note, AgeX has agreed to seek the vote of AgeX stockholders to approve the ability of AgeX and Juvenescence to convert the Outstanding Amount into shares of AgeX common stock under the Borrower Conversion and Lender Conversion provisions of the Secured Note even if the Borrower Conversion or Lender Conversion, as applicable, would result in (a) Juvenescence receiving additional shares in excess of 19.9% of the AgeX common stock outstanding as of the date of the Secured Note for less than the greater of book value or the applicable tranche market values of AgeX common stock, or (b) Juvenescence owning more than 50% of AgeX outstanding common stock.

2022 Warrants: Upon each draw down of funds under the Secured Note, AgeX will issue to Juvenescence warrants to purchase shares of AgeX common stock (“2022 Warrants”). The 2022 Warrants will be governed by the terms of a Warrant Agreement between AgeX and Juvenescence. The number of 2022 Warrants to be issued will be equal to 50% of the number determined by dividing the amount of the applicable loan draw by the applicable Market Price. The Market Price will be the last closing price per share of AgeX common stock on the NYSE American or other national securities exchange preceding the delivery of the notice from AgeX requesting a draw of funds that triggers the obligation to issue 2022 Warrants; provided, however that if AgeX common stock is not traded on a national securities exchange the Market Price shall be determined with reference to closing prices quoted or bid and asked prices on an interdealer quotation system averaged over twenty consecutive trading days. The exercise price of the 2022 Warrants will be the applicable Market Price. The 2022 Warrants will expire at 5:00 p.m. New York time three years after the date of issue.

The Warrant Agreement governing the 2022 Warrants contains a “change of control blocker” provision intended to prevent an exercise of 2022 Warrants that would violate the Change in Control Rule. The exercise price of the 2022 Warrants is set with reference to the market price of AgeX common stock so the 20% Rule would have no effect on the exercise of 2022 Warrants. Under the terms of the Secured Note, AgeX has agreed to seek the vote of AgeX stockholders to approve the ability of Juvenescence to exercise its 2022 Warrants if the exercise would cause Juvenescence’s ownership of AgeX common stock to equal or exceed 50% of the outstanding AgeX common stock.

Registration Rights Agreements

AgeX entered into a Registration Rights Agreement and certain amendments to the original agreement, pursuant to which it has agreed to register for sale under the Securities Act all shares of AgeX common stock presently held by Juvenescence or that may be acquired by Juvenescence through the exercise of common stock purchase warrants that they hold or that they may acquire pursuant to the 2020 Loan Agreement and the Secured Note, and shares that they may acquire through the conversion of loans under the 2020 Loan Agreement and the Secured Note, including principal and accrued interest, and the amount of the loan Origination Fee under the Secured Note. AgeX has filed a registration statement on Form S-3, which has become effective under the Securities Act, for offerings on a delayed or continuous basis covering 16,447,500 shares of our common stock held by Juvenescence and 3,248,246 shares of AgeX common stock that may be issued upon the exercise of a portion of the warrants held by Juvenescence. Juvenescence retains the right to require AgeX to register additional shares of common stock that Juvenescence may acquire through the exercise of warrants or the conversion of 2020 Loan Agreement loans, Secured Note loans, and the Origination Fee under the Secured Note. AgeX is obligated to pay the fees and expenses of each registered offering under such registration rights agreement except for underwriting discounts and commissions. AgeX and Juvenescence will indemnify each other from certain liabilities in connection the registration, offer, and sale of securities under a registration statement, including liabilities arising under the Securities Act.

Director Independence

Gregory H. Bailey, Joanne Hackett, and Michael H. May qualify as “independent” in accordance with Section 803(A) of the NYSE American Company Guide. Annalisa Jenkins who served as director during 2020 also was independent under that standard. Ms. Jenkins’ term as a director expired at our last annual meeting of stockholders on December 29, 2021. The members of our Audit Committee meet the additional independence standards under Section 803(B)(2) of the NYSE American Company Guide and Rule 10A-3 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). The members of our Compensation Committee meet the additional independence standards under Section 805(c)(1) of the NYSE American Company Guide. Our independent directors received no compensation or remuneration during the last fiscal year for serving as directors except as disclosed under “Compensation of Directors” in Item 11 of this Report. None of the independent directors, nor any of the members of their respective families, have participated in any transaction with us that would disqualify them as “independent” directors under the standards described above.

Michael D. West does not qualify as “independent” because he serves as our President and Chief Executive Officer. Gregory H. Bailey does not meet the independence standard for service on the Audit Committee under Exchange Act Rule 10A-3 because he is the Chief Executive Officer of Juvenescence Limited, which is our largest stockholder and beneficially owns approximately 69.45% of our common stock as reflected in the table included in Item 12 to this Report.

Item 14. Principal Accounting Fees and Services

OUM & Co., LLP (“OUM”) served as our independent registered public accountants from October 2017 until July 15, 2021, and audited our annual financial statements for the fiscal year ended December 31, 2020. During July 2021 OUM combined its practice with WithumSmith+Brown, PC (“Withum”) through a transaction in which certain OUM partners and professional staff joined Withum as partners or employees. As a result of this transaction, on July 15, 2021, OUM resigned as our independent registered public accounting firm, and on July 20, 2021 the Audit Committee of our Board of Directors approved the engagement of Withum as our new independent registered public accounting firm.

Audit Fees, Audit Related Fees, Tax Fees and Other Fees

The following table sets forth the aggregate fees billed to us during the fiscal years ended December 31, 2021 and 2020 by Withum and OUM:

	Withum		OUM		Total	
	2021	2020	2021	2020	2021	2020
Audit Fees ⁽¹⁾	\$ 267,000	\$ -	\$ 36,000	\$ 285,000	\$ 303,000	\$ 285,000
Audit Related ⁽²⁾	-	-	54,000	28,000	54,000	28,000
	<u>\$ 267,000</u>	<u>\$ -</u>	<u>\$ 90,000</u>	<u>\$ 313,000</u>	<u>\$ 357,000</u>	<u>\$ 313,000</u>

(1) Audit Fees consist of fees billed for professional services rendered for the audit of our annual financial statements included in our Annual Report on Form 10-K, and review of interim financial statements included in our Quarterly Reports on Form 10-Q, and services that are normally provided by our independent registered public accountants in connection with statutory and regulatory filings or engagements.

(2) Audit-Related Fees relate to assurance and related services that are reasonably related to the performance of the audit or review of our consolidated financial statements and are not reported under “Audit Fees.” This category would include fees related to non-routine SEC filings.

Pre-Approval of Audit and Permissible Non-Audit Services

Our Audit Committee requires pre-approval of all audit and non-audit services. Other than *de minimis* services incidental to audit services, non-audit services shall generally be limited to tax services such as advice and planning and financial due diligence services. All fees for such non-audit services must be approved by the Audit Committee, except to the extent otherwise permitted by applicable SEC regulations. The Audit Committee may delegate to one or more designated members of the Audit Committee the authority to grant pre-approvals, provided such approvals are presented to the Audit Committee at a subsequent meeting. During 2021 and 2020, 100% of the fees paid to Withum and OUM were approved by the Audit Committee.

PART IV

Item 15. Financial Statement and Exhibits

(a) Financial Statements.

The following financial statements of AgeX are filed in this Report:

[Consolidated Balance Sheets](#)
[Consolidated Statements of Operations](#)
[Consolidated Statements of Comprehensive Loss](#)
[Consolidated Statements of Stockholders' Equity \(Deficit\)](#)
[Consolidated Statements of Cash Flows](#)
[Notes to Consolidated Financial Statements](#)

(b) Exhibits.

Exhibit Index

Exhibit Number	Exhibit Description	Incorporation By Reference			
		Form	SEC File No.	Exhibit	Filing Date
2.1#†	Asset Purchase Agreement, dated as of August 13, 2018, by and between Escape Therapeutics, Inc. and AgeX Therapeutics, Inc.	10-12(b) A-2	001-38519	2.1	8/30/2018
2.2	Agreement and Plan of Merger, dated March 6, 2021, by Atlas Capital Partners Limited, GCLMS Acquisition Corporation, LifeMap Sciences, Inc. and AgeX Therapeutics, Inc.	8-K	001-38519	10.1	3/8/2021
3.1	Certificate of Incorporation of AgeX Therapeutics, Inc.	10-12(b)	001-38519	3.1	6/8/2018
3.2	Bylaws of AgeX Therapeutics, Inc.	10-12(b)	001-38519	3.2	6/8/2018
4.1	Specimen of Common Stock Certificate AgeX Therapeutics, Inc.	10-12(b) A-2	001-38519	4.1	8/30/2018
4.2	Warrant dated August 13, 2019.	10-Q	001-38519	4.1	8/14/2019
4.3	Form of Warrant included in Warrant Agreement dated March 30, 2020.	10-K	001-38519	10.25	3/30/2020
4.4	Form of Warrant included in Warrant Agreement dated February 14, 2022.	8-K	001-38519		2/15/2022
4.5	Description of Securities.	10-K	001-38519	4.3	3/30/2020
10.1#**	Asset Contribution and Separation Agreement dated August 17, 2017, between Lineage Cell Therapeutics, Inc. and AgeX Therapeutics, Inc.	10-Q	001-12830	10.1	11/9/2017
10.2#**	License Agreement, dated August 17, 2017, between Lineage Cell Therapeutics, Inc. and AgeX Therapeutics, Inc.	10-Q	001-12830	10.2	11/9/2017
10.3	AgeX Therapeutics, Inc. 2017 Equity Incentive Plan.	S-8	333-229432	99.1	1/30/2019
10.4	Form of AgeX Therapeutics, Inc. Employee Stock Option Agreement.	S-8	333-229432	99.2	1/30/2019
10.5	Form of AgeX Therapeutics, Inc. Non-Employee Director Stock Option Agreement.	S-8	333-229432	99.3	1/30/2019
10.6	Form of AgeX Therapeutics, Inc. Restricted Stock Agreement.	S-8	333-229432	99.4	1/30/2019
10.7	Form of AgeX Therapeutics, Inc. Restricted Stock Unit Agreement.	S-8	333-229432	99.5	1/30/2019
10.8#	Sublicense Agreement, dated September 26, 2017, between Lineage Cell Technology, Inc. and AgeX Therapeutics, Inc.	10-12(b) A-1	001-38519	10.7	7/19/2018
10.9	First Amendment, dated November 8, 2017, to License Agreement, dated August 17, 2017, between Lineage Cell Therapeutics, Inc. and AgeX Therapeutics, Inc.	10-12(b) A-1	001-38519	10.8	7/19/2018
10.10#	Sublicense Agreement, dated August 17, 2017, by and among OrthoCyte Corporation, Lineage Cell Therapeutics, Inc. and AgeX Therapeutics, Inc.	10-12(b) A-1	001-38519	10.9	7/19/2018

Exhibit Number	Exhibit Description	Incorporation By Reference			
		Form	SEC File No.	Exhibit	Filing Date
10.12#	License Agreement, dated August 17, 2017, by and between ES Cell International Ptd Ltd., Lineage Cell Therapeutics, Inc. and AgeX Therapeutics, Inc.	10-12(b) A-1	001-38519	10.11	7/19/2018
10.13	Employee Matters Agreement, dated August 17, 2017, between Lineage Cell Therapeutics, Inc. and AgeX Therapeutics, Inc.	10-12(b) A-1	001-38519	10.13	7/19/2018
10.14	Employment Agreement, by and between AgeX Therapeutics, Inc. and Hal Sternberg, dated August 21, 2017.	10-12(b)	001-38519	10.17	6/8/2018
10.15	Tax Matters Agreement, dated August 17, 2017, between Lineage Cell Therapeutics, Inc. and AgeX Therapeutics, Inc.	10-12(b) A-1	001-38519	10.15	7/19/2018
10.16	Form of Registration Rights Agreement.	10-12(b) A-1	001-38519	10.16	7/19/2018
10.17#	License Agreement, dated August 17, 2017, between Lineage Cell Therapeutics, Inc. and AgeX Therapeutics, Inc.	10-12(b) A-1	001-38519	10.17	7/19/2018
10.18	Employment Agreement, by and between AgeX Therapeutics, Inc. and Michael D. West, dated October 18, 2018.	10-12(b) A-3	001-38519	10.19	10/22/2018
10.19	Loan Facility Agreement, dated August 13, 2019, between AgeX Therapeutics, Inc. and Juvenescence Limited.	10-Q	001-38519	10.1	8/14/2019
10.20	Warrant Agreement, dated August 13, 2019, between AgeX Therapeutics, Inc. and Juvenescence Limited, including form of warrant.	10-Q	001-38519	10.2	8/14/2019
10.21	Registration Rights Agreement, dated August 13, 2019, between AgeX Therapeutics, Inc. and Juvenescence Limited.	10-Q	001-38519	10.3	8/14/2019
10.22	Secured Convertible Facility Agreement, dated March 30, 2020, by and among AgeX Therapeutics, Inc., ReCyte Therapeutics, Inc., Reverse Bioengineering, Inc., and Juvenescence Limited.	10-K	001-38519	10.24	3/30/2020
10.23	Warrant Agreement, dated March 30, 2020, between AgeX Therapeutics, Inc. and Juvenescence Limited, including form of warrant.	10-K	001-38519	10.25	3/30/2020
10.24	Amendment No. 1 to Registration Rights Agreement, dated March 30, 2020, between AgeX Therapeutics, Inc. and Juvenescence Limited.	10-K	001-38519	10.26	3/30/2020
10.25	Asset Employment Agreement, by and between AgeX Therapeutics, Inc. and Andrea E. Park, dated May 15, 2020.	10-Q	001-38519	10.3	8/14/2020
10.26	First Amendment to Secured Convertible Facility Agreement, dated July 21, 2020, between AgeX Therapeutics, Inc. and Juvenescence Limited.	10-Q	001-38519	10.1	8/14/2020
10.27	First Amendment to Warrant Agreement, dated July 21, 2020, between AgeX Therapeutics, Inc. and Juvenescence Limited, including form of warrant.	10-Q	001-38519	10.2	8/14/2020
10.28	Second Amendment to Secured Convertible Facility Agreement, dated November 12, 2020, between AgeX Therapeutics, Inc. and Juvenescence Limited.	10-Q	001-38519	10.1	11/16/2020
10.29	Amendment No. 1 to Loan Facility Agreement, dated February 10, 2021, between AgeX Therapeutics, Inc. and Juvenescence Limited.	8-K	001-38519	10.1	2/11/2021

Exhibit Number	Exhibit Description	Incorporation By Reference			
		Form	SEC File No.	Exhibit	Filing Date
10.30	Amendment No. 2 to Registration Rights Agreement, dated February 10, 2021, between AgeX Therapeutics, Inc. and Juvenescence Limited.	8-K	001-38519	10.2	2/11/2021
10.31	Amendment No. 2 to Loan Facility Agreement, dated November 8, 2021, between AgeX Therapeutics, Inc. and Juvenescence Limited.	8-K	001-38519	10.1	11/9/2021
10.32	Amendment to AgeX Therapeutics, Inc. 2017 Equity Incentive Plan.	S-8	333-261997	99.1	1/4/2022
10.33†	Secured Note dated February 14, 2022, executed by AgeX Therapeutics, Inc. and Juvenescence Limited.	8-K	001-38519	10.1	2/15/2022
10.34†	Security Agreement, dated February 14, 2022, between AgeX Therapeutics, Inc. and Juvenescence Limited.	8-K	001-38519	10.2	2/15/2022
10.35	Warrant Agreement, dated February 14, 2022, between AgeX Therapeutics, Inc. and Juvenescence Limited.	8-K	001-38519	10.3	2/15/2022
10.36	Amendment No. 3 to Registration Rights Agreement, dated February 14, 2022, between AgeX Therapeutics, Inc. and Juvenescence Limited.	8-K	001-38519	10.4	2/15/2022
21.1*	List of Subsidiaries				
23.1*	Consent of WithumSmith+Brown, PC				
23.2*	Consent of OUM & Co. LLP				
31*	Rule 13a-14(a)/15d-14(a) Certification				
32*	Section 1350 Certification				
101*	Interactive Data File				
101.INS*	XBRL Instance Document				
101.SCH*	XBRL Taxonomy Extension Schema				
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase				
101.DEF*	XBRL Taxonomy Extension Definition Document				
101.LAB*	XBRL Taxonomy Extension Label Linkbase				
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase				
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)				

* Filed herewith.

** Incorporated by reference to Lineage's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017.

Confidential treatment has been granted with respect to portions of this exhibit (indicated by asterisks) and those portions have been separately filed by Lineage Cell Therapeutics, Inc. with the Securities and Exchange Commission.

† Certain schedules and exhibits to this agreement have been omitted in accordance with Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the Securities and Exchange Commission on request.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized on the 29th day of March 2022.

AGEX THERAPEUTICS, INC.

By: /s/ Michael D. West

Michael D. West
Chief Executive Officer

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Michael D. West</u> MICHAEL D. WEST	President and Chief Executive Officer and Director (Principal Executive Officer)	March 29, 2022
<u>/s/ Andrea E. Park</u> ANDREA E. PARK	Chief Financial Officer (Principal Financial and Accounting Officer)	March 29, 2022
<u>/s/ Gregory H. Bailey</u> GREGORY H. BAILEY	Director	March 29, 2022
<u>/s/ Michael H. May</u> MICHAEL H. MAY	Director	March 29, 2022
<u>/s/ Joanne M. Hackett</u> JOANNE M. HACKETT	Director	March 29, 2022

LIST OF SUBSIDIARIES

Subsidiary	Ownership	Country
ReCyte Therapeutics, Inc.	94.8%	USA
Reverse Bioengineering, Inc.	100%	USA

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-251988) and Form S-8 (Nos. 333-229432 and 333-261997) of AgeX Therapeutics, Inc. of our report dated March 29, 2022, relating to the consolidated financial statements of AgeX Therapeutics, Inc., which appears in this Form 10-K.

/s/ WithumSmith+Brown, PC

San Francisco, California
March 29, 2022

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 333-261997 and 333-229432) and Form S-3 (File No. 333-251988) of AgeX Therapeutics, Inc. of our report dated March 31, 2021, relating to the consolidated financial statements of AgeX Therapeutics, Inc., which appears in this Annual Report on Form 10-K.

/s/ OUM & CO. LLP

San Francisco, California
March 29, 2022

CERTIFICATION

I, Michael D. West, certify that:

1. I have reviewed this annual report on Form 10-K of AgeX Therapeutics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this periodic report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 29, 2022

/s/ Michael D. West

Michael D. West
Chief Executive Officer

CERTIFICATION

I, Andrea E. Park, certify that:

1. I have reviewed this annual report on Form 10-K of AgeX Therapeutics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this periodic report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 29, 2022

/s/ Andrea E. Park

Andrea E. Park
Chief Financial Officer

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of AgeX Therapeutics, Inc. (the “Company”) for the year ended December 31, 2021, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), we, Michael D. West, Chief Executive Officer, and Andrea E. Park, Chief Financial Officer, of the Company, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 29, 2022

/s/ Michael D. West

Michael D. West
Chief Executive Officer

/s/ Andrea E. Park

Andrea E. Park
Chief Financial Officer
