# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION
**Washington, D.C. 20549**

# FORM 10-Q

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

For the quarterly period ended March 31, 2022

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 **001-12830**

# Lineage Cell Therapeutics, Inc.
(Exact name of registrant as specified in its charter)

| **California** | **94-3127919** |
|---|---|
| (State or other jurisdiction of incorporation or organization) | (IRS Employer Identification No.) |

**2173 Salk Avenue, Suite 200**
**Carlsbad, California 92008**
(Address of principal executive offices) (Zip code)

(Registrant's telephone number, including area code) (442) 287-8990

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

| Title of each class | Trading Symbol | Name of exchange on which registered |
|---|---|---|
| **Common shares no par value** | **LCTX** | **NYSE American** |

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 ☐ | Accelerated filer ☐ |
| Non-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 pursuant to Section 13(a) of the Exchange Act. ☐

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

The number of common shares outstanding as of May 6, 2022 was 169,727,395.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q (this "Report") contains "forward-looking statements" (within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended) that involve risks and uncertainties. We make such forward-looking statements pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. All statements other than statements of historical facts contained in this Report are forward-looking statements. In some cases, you can identify forward-looking statements by words such as "anticipate," "believe," "contemplate," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "seek," "should," "target," "will," "would," or the negative of these words or other comparable terminology. These forward-looking statements include, but are not limited to, statements relating to:

- the Collaboration and License Agreement we entered into with F. Hoffmann-La Roche Ltd and Genentech, Inc., a member of the Roche Group, activities expected to occur thereunder, and the potential to receive the developmental, regulatory, and commercialization milestone and royalty payments thereunder;
- our plans to research, develop and commercialize our product candidates;
- the initiation, progress, success, cost and timing of our clinical trials and product development activities;
- the therapeutic potential of our product candidates, and the disease indications for which we intend to develop our product candidates;
- our ability to manufacture our product candidates for clinical development and, if approved, for commercialization, and the timing and costs of such manufacture;
- the performance of third parties in connection with the development and manufacture of our product candidates, including third parties conducting our clinical trials as well as third-party suppliers and manufacturers;
- the potential of our cell therapy platform, and our plans to apply our platform to research, develop and commercialize our product candidates;
- our ability to obtain funding for our operations, including funding necessary to initiate and complete clinical trials of our product candidates;
- the size and growth of the potential markets for our product candidates and our ability to serve those markets;
- the potential scope and value of our intellectual property rights;
- our ability, and the ability of our licensors, to obtain, maintain, defend and enforce intellectual property rights protecting our product candidates, and our ability to develop and commercialize our product candidates without infringing the proprietary rights of third parties;
- our ability to recruit and retain key personnel;
- the effects on our operations of the COVID-19 pandemic and war in Ukraine; and
- other risks and uncertainties, including those described and referenced under Part II, Item 1A, "Risk Factors" of this Report.

Forward-looking statements reflect our current views with respect to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed and referenced under Part II, Item 1A, "Risk Factors" of this Report. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

**PART I – FINANCIAL INFORMATION**

**Item 1. Financial Statements**

**LINEAGE CELL THERAPEUTICS, INC. AND SUBSIDIARIES**
**CONDENSED CONSOLIDATED BALANCE SHEETS**
**(IN THOUSANDS)**

| | March 31, 2022 (Unaudited) | December 31, 2021 |
|---|---|---|
| **ASSETS** | | |
| CURRENT ASSETS | | |
| Cash and cash equivalents | $ 78,062 | $ 55,742 |
| Marketable equity securities | 1,882 | 2,616 |
| Accounts and grants receivable, net (Note 3) | 515 | 50,840 |
| Prepaid expenses and other current assets | 1,413 | 2,351 |
| Total current assets | 81,872 | 111,549 |
| | | |
| NONCURRENT ASSETS | | |
| Property and equipment, net (Notes 6 and 14) | 4,548 | 4,872 |
| Deposits and other long-term assets | 639 | 630 |
| Goodwill | 10,672 | 10,672 |
| Intangible assets, net | 46,789 | 46,822 |
| TOTAL ASSETS | $ 144,520 | $ 174,545 |
| | | |
| **LIABILITIES AND SHAREHOLDERS' EQUITY** | | |
| CURRENT LIABILITIES | | |
| Accounts payable and accrued liabilities | $ 8,957 | $ 27,969 |
| Lease liabilities, current portion (Note 14) | 719 | 801 |
| Financing lease, current portion (Note 14) | 31 | 30 |
| Deferred revenues (Note 3) | 14,885 | 18,119 |
| Liability classified warrants, current portion | 1 | 197 |
| Total current liabilities | 24,593 | 47,116 |
| | | |
| LONG-TERM LIABILITIES | | |
| Deferred tax liability | 2,076 | 2,076 |
| Deferred revenues, net of current portion (Note 3) | 30,821 | 32,454 |
| Lease liability, net of current portion (Note 14) | 1,781 | 1,941 |
| Financing lease, net of current portion (Note 14) | 26 | 30 |
| Liability classified warrants and other long-term liabilities | 5 | 30 |
| TOTAL LIABILITIES | 59,302 | 83,647 |
| | | |
| Commitments and contingencies (Note 14) | | |
| | | |
| SHAREHOLDERS' EQUITY | | |
| Preferred shares, no par value, authorized 2,000 shares; none issued and outstanding as of March 31, 2022 and December 31, 2021 | - | - |
| Common shares, no par value, 250,000 shares authorized; 169,727 and 169,477 shares issued and outstanding as of March 31, 2022 and December 31, 2021, respectively | 435,818 | 434,529 |
| Accumulated other comprehensive loss | (5,087) | (5,211) |
| Accumulated deficit | (344,184) | (337,097) |
| Lineage Cell Therapeutics, Inc. shareholders' equity | 86,547 | 92,221 |
| Noncontrolling (deficit) | (1,329) | (1,323) |
| Total shareholders' equity | 85,218 | 90,898 |
| TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY | $ 144,520 | $ 174,545 |

See accompanying notes to the condensed consolidated interim financial statements.

**LINEAGE CELL THERAPEUTICS, INC. AND SUBSIDIARIES**
**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS**
**(IN THOUSANDS, EXCEPT PER SHARE DATA)**
**(UNAUDITED)**

| | Three Months Ended March 31, | |
|---|---|---|
| | **2022** | **2021** |
| **REVENUES:** | | |
| Collaboration revenues | $ 4,865 | $ - |
| Royalties | 372 | 293 |
| Grant revenues | - | 98 |
| Total revenues | 5,237 | 391 |
| Cost of sales | (176) | (112) |
| Gross profit | 5,061 | 279 |
| **OPERATING EXPENSES:** | | |
| Research and development | 2,988 | 3,394 |
| General and administrative | 8,469 | 3,935 |
| Total operating expenses | 11,457 | 7,329 |
| Loss from operations | (6,396) | (7,050) |
| **OTHER INCOME/(EXPENSES):** | | |
| Interest income, net | 1 | 2 |
| Gain on sale of marketable securities | - | 6,024 |
| Unrealized (loss) gain on marketable equity securities | (735) | 1,239 |
| Unrealized gain on warrant liability | 221 | 18 |
| Other (expenses), net | (184) | (1,681) |
| Total other income (expenses), net | (697) | 5,602 |
| **LOSS BEFORE INCOME TAXES** | (7,093) | (1,448) |
| Deferred income tax benefit | - | - |
| **NET LOSS** | (7,093) | (1,448) |
| Net loss attributable to noncontrolling interest | 6 | 32 |
| **NET LOSS ATTRIBUTABLE TO LINEAGE CELL THERAPEUTICS, INC.** | $ (7,087) | $ (1,416) |
| NET LOSS PER COMMON SHARE: | | |
| BASIC | $ (0.04) | $ (0.01) |
| DILUTED | $ (0.04) | $ (0.01) |
| WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING: | | |
| BASIC | 169,647 | 158,725 |
| DILUTED | 169,647 | 158,725 |

See accompanying notes to the condensed consolidated interim financial statements.

**LINEAGE CELL THERAPEUTICS, INC. AND SUBSIDIARIES**
**CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS)/INCOME**
**(IN THOUSANDS)**
**(UNAUDITED)**

| | Three Months Ended March 31, | |
|---|---|---|
| | **2022** | **2021** |
| **NET LOSS** | $ (7,093) | $ (1,448) |
| Other comprehensive income, net of tax: | | |
| Foreign currency translation adjustment, net of tax | 124 | 1,576 |
| **COMPREHENSIVE (LOSS)/INCOME** | (6,969) | 128 |
| Less: Comprehensive loss attributable to noncontrolling interest | 6 | 32 |
| **COMPREHENSIVE (LOSS)/INCOME ATTRIBUTABLE TO LINEAGE CELL THERAPEUTICS, INC. COMMON SHAREHOLDERS** | $ (6,963) | $ 160 |

See accompanying notes to the condensed consolidated interim financial statements.

**LINEAGE CELL THERAPEUTICS, INC. AND SUBSIDIARIES**
**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**
**(IN THOUSANDS)**
**(UNAUDITED)**

| | Three Months Ended March 31, | |
|---|---|---|
| | **2022** | **2021** |
| **CASH FLOWS FROM OPERATING ACTIVITIES:** | | |
| Net loss attributable to Lineage Cell Therapeutics, Inc. | $ (7,087) | $ (1,416) |
| Net loss allocable to noncontrolling interest | (6) | (32) |
| Adjustments to reconcile net loss attributable to Lineage Cell Therapeutics, Inc. to net cash used in operating activities: | | |
| Gain on sale of marketable securities | - | (6,024) |
| Unrealized loss/(gain) on marketable equity securities | 735 | (1,239) |
| Depreciation expense, including amortization of leasehold improvements | 150 | 174 |
| Amortization of right-of-use asset | (4) | 10 |
| Amortization of intangible assets | 32 | 112 |
| Stock-based compensation | 1,106 | 539 |
| Common stock issued for services | - | 102 |
| Change in unrealized gain on warrant liability | (221) | (18) |
| Foreign currency remeasurement and other gain | 75 | 1,712 |
| Changes in operating assets and liabilities: | | |
| Accounts and grants receivable (Note 3) | 50,321 | (135) |
| Prepaid expenses and other current assets | 573 | (92) |
| Accounts payable and accrued liabilities (Note 7) | (18,905) | (1,031) |
| Deferred revenue and other liabilities (Note 3) | (4,865) | (86) |
| Net cash provided by (used in) operating activities | 21,904 | (7,424) |
| | | |
| **CASH FLOWS FROM INVESTING ACTIVITIES:** | | |
| Proceeds from the sale of OncoCyte common shares | - | 10,064 |
| Proceeds from the sale of HBL common shares | - | 21 |
| Purchase of equipment and other assets | (46) | (11) |
| Net cash (used in) provided by investing activities | (46) | 10,074 |
| | | |
| **CASH FLOWS FROM FINANCING ACTIVITIES:** | | |
| Proceeds from employee options exercised | 379 | 1,717 |
| Common shares received and retired for employee taxes paid | (8) | (13) |
| Proceeds from exercise of subsidiary warrants | 2 | - |
| Proceeds from sale of common shares | 148 | 19,873 |
| Payments for offering costs | - | (614) |
| Repayment of lease liability | (8) | - |
| Net cash provided by financing activities | 513 | 20,963 |
| Effect of exchange rate changes on cash, cash equivalents and restricted cash | (42) | (80) |
| NET INCREASE IN CASH, CASH EQUIVALENTS AND RESTRICTED CASH | 22,329 | 23,533 |
| CASH, CASH EQUIVALENTS AND RESTRICTED CASH: | | |
| At beginning of the period | 56,277 | 33,183 |
| At end of the period | $ 78,606 | $ 56,716 |

See accompanying notes to the condensed consolidated interim financial statements.

## 1. Organization and Business Overview

Lineage Cell Therapeutics, Inc. ("Lineage," "we," "us," or "our") is a clinical-stage biotechnology company developing novel cell therapies to address unmet medical needs. Our programs are based on our proprietary cell-based technology and associated development and manufacturing capabilities. From this platform, we design, develop, and manufacture specialized human cells with anatomical and physiological functions similar or identical to cells found naturally in the human body. These cells which we manufacture are created by developmental differentiation protocols that we apply to established and well-characterized, pluripotent, and self-renewing cell lines. These functional cells are transplanted into patients and are designed to (a) replace or support cells that are dysfunctional or absent due to degenerative disease or traumatic injury, or (b) help the body mount a more robust and effective immune response to cancer or infectious diseases.

Our strategy is to efficiently leverage our technology platform and development and manufacturing capabilities to develop and advance our cell therapy programs internally or in conjunction with strategic partners to further enhance their value. As one example, in December 2021, we entered into a Collaboration and License Agreement (the "Roche Agreement") with F. Hoffmann-La Roche Ltd and Genentech, Inc., a member of the Roche Group (collectively, "Roche"), wherein we granted to Roche exclusive worldwide rights to develop and commercialize retinal pigment epithelial ("RPE") cell therapies, including our proprietary cell therapy program known as OpRegen®, for the treatment of ocular disorders, including geographic atrophy (GA) secondary to age-related macular degeneration (AMD). Roche has paid Lineage a $50.0 million upfront payment under this alliance and Lineage is eligible to receive up to an additional $620.0 million in certain developmental, regulatory, and commercialization milestone payments. Lineage also is eligible for tiered double-digit percentage royalties on net sales of OpRegen in the U.S and other major markets.

As of March 31, 2022, we have four allogeneic, or "off-the-shelf," cell therapy programs in development, of which three have reached clinical testing:

- *OpRegen*®, a retinal pigment epithelial ("RPE") cell replacement therapy currently in a Phase 1/2a multicenter clinical trial for the treatment of geographic atrophy (GA) secondary to age-related macular degeneration (AMD). There are currently no U.S. Food and Drug Administration ("FDA") or European Medicines Agency approved treatment options available for patients with GA. Enrollment in the trial was completed in 2020. In December 2021, this program was partnered with Roche for further clinical development and commercialization.

- *OPC1*, an oligodendrocyte progenitor cell therapy currently in long-term follow-up for a Phase 1/2a multicenter clinical trial for spinal cord injuries ("SCI"). This clinical trial has been partially funded by $14.3 million dollars received under a grant by the California Institute for Regenerative Medicine ("CIRM").

- *VAC*, an allogeneic cancer immunotherapy of antigen-presenting dendritic cells. One of the VAC product candidates, VAC2, is currently in a Phase 1 clinical trial in non-small cell lung cancer ("NSCLC"). This clinical trial is being funded and conducted by Cancer Research UK, one of the world's largest independent cancer research charities. We also have another VAC-based product candidate in preclinical development with our partner, Immunomic Therapeutics, Inc. ("ITI"), for the treatment of glioblastoma multiforme ("GBM").

- *ANP1*, an auditory neuron progenitor cell therapy currently in preclinical development for the treatment of debilitating hearing loss ("DHL").

We have additional, undisclosed product candidates in various stages of early development, ranging from conceptual to active preclinical development, which cover a range of therapeutic areas and unmet medical needs. Generally, these product candidates are based on the same pluripotent platform technology and employ a similar guided cell differentiation and transplant approach as the four products detailed above.

In addition to seeking to create value for shareholders by developing product candidates and other technologies through our clinical development programs, we also may seek to create value from our large patent estate and related technologies through partnering and/or strategic transactions. We founded two companies based on Lineage's intellectual property that later became publicly traded companies: OncoCyte Corporation ("OncoCyte") and AgeX Therapeutics, Inc. ("AgeX"). We continue to hold common stock in OncoCyte as of March 31, 2022.

## 2. Basis of Presentation, Liquidity and Summary of Significant Accounting Policies

The unaudited condensed consolidated interim financial statements presented herein, and discussed below, have been prepared in accordance with generally accepted accounting principles in the United States ("GAAP") for interim financial information and with the instructions to Form 10-Q and Article 8 of Regulation S-X. In accordance with those rules and regulations certain information and footnote disclosures normally included in comprehensive consolidated financial statements have been condensed or omitted. The condensed consolidated balance sheet as of December 31, 2021 was derived from the audited consolidated financial statements at that date, but does not include all the information and footnotes required by GAAP. These condensed consolidated interim financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in Lineage's Annual Report on Form 10-K for the year ended December 31, 2021 (the "2021 10-K"), as filed with the Securities and Exchange Commission (the "SEC") on March 10, 2022.

The accompanying condensed consolidated interim financial statements, in the opinion of management, include all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of Lineage's financial condition and results of operations. The condensed consolidated results of operations are not necessarily indicative of the results to be expected for any other interim period or for the entire year.

*Principles of consolidation*

Lineage's condensed consolidated interim financial statements include the accounts of its subsidiaries. All material intercompany accounts and transactions have been eliminated in consolidation. The following table reflects Lineage's ownership, directly or through one or more subsidiaries of the outstanding shares of its subsidiaries as of March 31, 2022.

| Subsidiary | Field of Business | Lineage Ownership | Country |
|---|---|---|---|
| Asterias BioTherapeutics, Inc. | Cell based therapeutics to treat neurological conditions and cancer | 100% | USA |
| Cell Cure Neurosciences Ltd. | Manufacturing of Lineage's cell replacement platform technology | 99%(1) | Israel |
| ES Cell International Pte. Ltd. | Research and clinical grade cell lines | 100% | Singapore |
| OrthoCyte Corporation | Research in orthopedic diseases and injuries | 99.8% | USA |

(1) Includes shares owned by Lineage and ES Cell International Pte. Ltd.

As of March 31, 2022, Lineage consolidated its direct and indirect wholly owned or majority-owned subsidiaries because Lineage 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 shareholders' equity on Lineage's consolidated balance sheets.

*Liquidity*

At March 31, 2022, we had $79.9 million of cash, cash equivalents and marketable equity securities. Based on our current operating plan, we believe that our cash, cash equivalents and marketable securities, together with our projected cash flows, will be sufficient to enable us to carry out our planned operations through at least twelve months from the issuance date of our consolidated financial statements included elsewhere in this Report.

*Capital Resources*

Since inception we have incurred significant operating losses and have funded our operations primarily through the issuance of equity securities, the sale of common stock of our former subsidiaries, OncoCyte and AgeX, receipt of proceeds from research grants, revenues from collaborations, royalties from product sales, and sales of research products and services.

Our projected cash flows are subject to various risks and uncertainties, including those described and referenced under Part II, Item 1A, "Risk Factors" of this Report. See the discussion in Management's Discussion and Analysis of Financial Condition and Results of Operations under "Cash Flows" for additional information regarding our sources of cash during the reporting period.

As of March 31, 2022, $63.8 million remained available for sale under our at the market offering program. See Note 10 (Shareholders' Equity) to the condensed consolidated interim financial statements included in this Report for additional information.

We may use our marketable equity securities for liquidity as necessary and as market conditions allow. The market value of our marketable equity securities may not represent the amount that could be realized in a sale of such securities due to various market and regulatory factors, including trading volume, prevailing market conditions and prices at the time of any sale and subsequent sales of securities by the entities. In addition, the value of our marketable equity securities may be significantly and adversely impacted by deteriorating global economic conditions and the recent disruptions to and volatility in the credit and financial markets in the United States and worldwide resulting from the ongoing COVID-19 pandemic and the conflict in Ukraine.

*Additional Capital Requirements*

Our financial obligations primarily consist of vendor contracts to provide research services and other purchase commitments with suppliers. In the normal course of business, we enter into services agreements with contract research organizations, contract manufacturing organizations and other third parties. Generally, these agreements provide for termination upon notice, with specified amounts due upon termination based on the timing of termination and the terms of the agreement. The amounts and timing of payments under these agreements are uncertain and contingent upon the initiation and completion of the services to be provided.

Our commitments also include obligations to our licensors under our in-license agreements, which may include sublicense fees, milestones fees, royalties and reimbursement of patent maintenance costs. Sublicense fees are payable to licensors when we sublicense underlying intellectual property to third parties; the fees are based on a percentage of the license fees we receive from sublicensees. Milestone fees are payable to licensors upon our future achievement of certain development and regulatory milestones. Royalties are payable to licensors based on a percentage of net sales of licensed products. Patent maintenance costs are payable to licensors as reimbursement for the cost of maintaining of license patents. Due to the contingent nature of the payments, the amounts and timing of payments to licensors under our in-license agreements are uncertain and may fluctuate significantly from period to period.

*Significant Accounting Policies*

*Marketable Equity Securities*

Lineage accounts for the shares it holds in OncoCyte and Hadasit Bio-Holdings Ltd ("HBL") as marketable equity securities in accordance with ASC 320-10-25, *Investments – Debt and Equity Securities*, as amended by Accounting Standards Update ("ASU") 2016-01, *Financial Instruments–Overall: Recognition and Measurement of Financial Assets and Financial Liabilities*, further discussed below.

The OncoCyte shares have readily determinable fair values quoted on the NYSE American under trading symbol "OCX". The HBL shares have a readily determinable fair value quoted on the Tel Aviv Stock Exchange ("TASE") under the trading symbol "HDST" where share prices are denominated in New Israeli Shekels (NIS).

*Revenue Recognition*

Lineage recognizes revenue in accordance with Financial Accounting Standards Board ("FASB") ASU 2014-09, *Revenues from Contracts with Customers (Topic 606)*, and 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 is entitled to receive in exchange for such product or service. In doing so, Lineage 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. Lineage considers the terms of a contract and all relevant facts and circumstances when applying the revenue recognition standard. Lineage applies the revenue recognition standard, including the use of any practical expedients, consistently to contracts with similar characteristics and in similar circumstances.

In applying the provisions of ASU 2014-09, Lineage has determined that government grants are out of the scope of ASU 2014-09 because the government entities do not meet the definition of a "customer," as defined by ASU 2014-09, as there is not considered to be a transfer of control of goods or services to the government entities funding the grant. In the absence of applicable guidance under GAAP, the Company's policy is to recognize grant revenue when the related costs are incurred and the right to payment is realized. Costs incurred are recorded in research and development and general and administrative expenses on the accompanying statements of operations.

Deferred grant revenues represent grant funds received from the governmental funding agencies for which the allowable expenses have not yet been incurred as of the latest balance sheet date reported.

*Royalties from Product Sales and License Fees*

For agreements that include sales-based royalties, including commercial milestone payments based on the level of sales, and the license is deemed to be the predominant item to which the royalties relate, Lineage recognizes revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). Lineage estimates and recognizes royalty revenues based on all available information, including estimates provided by the customer or licensee from which Lineage obtains such estimates directly for each reporting period. Actual revenues ultimately received may differ from those estimates recorded and are adjusted in the period when information to actuals is available to Lineage.

*Collaborative Agreements*

In December 2021, Lineage entered into an exclusive worldwide collaboration and license agreement with Roche for the development and commercialization of OpRegen. Under the terms of the Roche Agreement, Roche agreed to pay Lineage a $50.0 million upfront payment and Lineage is eligible to receive up to an additional $620.0 million in certain developmental, regulatory and commercialization milestone payments. Lineage is also eligible to receive tiered double-digit percentage royalties on net sales of OpRegen. See Note 14 for additional information regarding this agreement.

In April 2021, Lineage entered a worldwide license and collaboration agreement with Immunomic Therapeutics, Inc. for the development and commercialization of an oncology asset utilizing the VAC platform. Under the terms of this agreement, Lineage is entitled to upfront licensing fees totaling up to $2.0 million, and up to $67.0 million in development and commercial milestones across multiple indications. Lineage also will be eligible to receive royalties up to 10% on net sales of future products.

We review collaborative agreements to determine if the accounting treatment falls under Accounting Standards Codification, Topic 606, *Revenue from Contracts with Customers* (“ASC 606”), or Accounting Standards Codification *Topic 808*, *Collaborative Arrangements* (“ASC 808”). While these agreements may be within the scope of ASC 808, we may analogize to ASC 606 for some aspects of the agreements.

The terms of our collaborative agreements typically include one or more of the following: (i) upfront fees; (ii) milestone payments related to achievement of development or commercial milestones; (iii) royalties on net sales of licensed products; and (iv) reimbursement of cost-sharing of research and development (“R&D”) expenses. Each of these payments eventually result in collaboration revenues. When a portion of non-refundable upfront fees or other payments received are allocated to continuing performance obligations under the terms of a collaborative arrangement, they are recorded as deferred revenue and recognized as collaboration revenue when (or as) the underlying performance obligation is satisfied.

To identify the performance obligations within the collaboration agreements, we first identify all the promises in the contract (i.e. explicit and implicit), which may include a customer option to acquire additional goods or services for free or at a discount. We exclude any immaterial promises from the assessment of identifying performance obligations. When an option is identified as providing a customer with a material right, the option is identified as a performance obligation. A portion of the transaction price is then allocated to the option and recognized when (or as) the future goods or services related to the option are provided, or when the option expires.

As part of the accounting treatment for these agreements, we must develop estimates and assumptions that require judgement to determine the underlying stand-alone selling price for each performance obligation which determines how the transaction price is allocated among the performance obligations. The following items are estimated in the calculation of the stand-alone selling price: forecasted revenues and development costs, development timelines, discount rates and probabilities of technical and regulatory success. We evaluate each performance obligation to determine if they can be satisfied at a point in time or over time, and we measure the services delivered to our collaboration partners each reporting period, which is based on the progress of the related program. If necessary, we adjust the measure of performance and related revenue recognition. Any such adjustments are recorded on a cumulative catch-up basis which would affect revenue and net income (loss) in the period of adjustment. In addition, variable consideration (e.g., milestone payments) must be evaluated to determine if it is constrained and, therefore, excluded from the transaction price.

*Upfront Fees:* If a license to our intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, we recognize collaboration revenues from the transaction price allocated to the license when the license is transferred to the licensee, and the licensee is able to use and benefit from the license. When the license is determined to be non-distinct, we utilize judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time, and, if over time, the appropriate method of measuring progress for purposes of recognizing collaboration revenue from the allocated transaction price. For example, when we receive upfront fees for the performance of research and development services, or when research and development services are not considered to be distinct from a license, we recognize collaboration revenue for those units of account over time using a measure of progress. We evaluate the measure of progress at each reporting period and, if necessary, adjust the measure of performance and related revenue as a change in estimate.

*Milestone Payments:* At the inception of each collaboration agreement that includes milestone payments (variable consideration), we evaluate whether the milestones are considered probable of being reached and estimate the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within our or the collaboration partner's control, such as non-operational developmental and regulatory approvals, are generally not considered probable of being achieved until those approvals are received. At the end of each reporting period, we re-evaluate the probability of achievement of milestones that are within our or the collaboration partner's control, such as operational developmental milestones and any related constraint, and if necessary, adjust our estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect collaboration revenues and net income (loss) in the period of adjustment. Revisions to our estimate of the transaction price may also result in negative collaboration revenues and net income (loss) in the period of adjustment.

*Royalties:* For collaboration agreements that include sales-based royalties, including commercial milestone payments based on the level of sales, and the license is deemed to be the predominant item to which the royalties relate, we recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied).

*Reimbursement, cost-sharing payments:* Under certain collaborative agreements, we will receive reimbursement for a portion of our R&D expenses. Such reimbursements are reviewed for gross versus net reporting considerations and reflected either as a reduction of R&D expense or as reimbursement revenue in our consolidated statements of operations.

As of March 31, 2022, we recorded $44.8 million and $0.8 million of deferred revenue on the condensed consolidated balance sheet, related to the collaboration agreements with each of Roche and Immunomic Therapeutics, Inc. ("ITI"). For the three months ended March 31, 2022, we recognized $4.9 million of revenue on the condensed statement of operations, related to the Roche collaboration agreement.

*Accounts and Grants Receivable, net*

Net accounts receivable amounted to $319,000 and $50,640,000, and grants receivable amounted to $196,000 and $200,000 as of March 31, 2022 and December 31, 2021, respectively. Net trade receivables include an allowance for doubtful accounts of approximately $74,000 as of March 31, 2022 and December 31, 2021, for those amounts deemed uncollectible by Lineage. Lineage establishes an allowance for doubtful accounts based on the evaluation of the collectability of its receivables on 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 customers operating results or financial position, and historical experience. If circumstances related to customers change, estimates of the recoverability of receivables would be further adjusted.

*Basic and diluted net income (loss) per share attributable to common shareholders*

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

For the three months ended March 31, 2022 and 2021, respectively, Lineage reported a net loss attributable to common shareholders, and therefore, all potentially dilutive common shares were considered antidilutive for those periods.

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

| | Three Months Ended March 31, (unaudited) | |
|---|---|---|
| | 2022 | 2021 |
| Stock options | 19,665 | 19,257 |
| Warrants [1] | - | 1,090 |
| Restricted stock units | 1,010 | 77 |

(1) Represents warrants Lineage assumed in connection with its acquisition of Asterias Biotherapeutics, Inc. Such warrants are classified as liabilities, are considered dilutive for earnings per share calculations in accordance with ASC 260, *Earnings Per Share*, and are determined to be antidilutive for the period presented.

*Restricted Cash*

In accordance with ASU 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*, Lineage explains the change during the period in the total of cash, cash equivalents and restricted cash, and includes restricted cash in cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the condensed consolidated statements of cash flows.

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the condensed consolidated balance sheet dates that comprise the total of the same such amounts shown in the condensed consolidated statements of cash flows for all periods presented herein (in thousands):

| | March 31, 2022 | December 31, 2021 |
|---|---|---|
| | (unaudited) | |
| Cash and cash equivalents | $ 78,062 | $ 55,742 |
| Restricted cash included in deposits and other long-term assets (see Note 14) | 544 | 535 |
| Total cash, cash equivalents, and restricted cash as shown in the condensed consolidated statements of cash flows | $ 78,606 | $ 56,277 |

*Stock-Based Compensation*

Lineage follows accounting standards governing share-based payments in accordance with ASC 718, *Compensation – Stock Compensation*, which require the measurement and recognition of compensation expense for all share-based payment awards made to directors and employees based on estimated fair values.

For employee and director stock options, we utilize the Black-Scholes option pricing model for valuing share-based payment awards. Lineage's determination of fair value of share-based payment awards on the date of grant using that option-pricing model is affected by the price of Lineage's common shares as well as by assumptions regarding a number of complex and subjective variables. These variables include, but are not limited to, expected stock price volatility over the term of the awards, and the expected term of options granted, which is derived using the simplified method, which is an average of the contractual term of the option and its vesting period, as we do not have sufficient historical exercise data upon which to estimate expected term. The risk-free rate is based on the U.S. Treasury yield in effect at the time of grant for zero coupon U.S. Treasury notes with maturities similar to the expected term of the awards. Forfeitures are accounted for as they occur.

For restricted stock unit awards ("RSUs") subject to service and/or performance vesting conditions, the grant-date fair value is established based on the closing price of Lineage's common shares on such date. Stock-based compensation expense for RSUs subject to only service conditions is recognized on a straight-line basis over the service period. Stock-based compensation expense for RSUs with both service and performance conditions is recognized on a graded basis only if it is probable that the performance condition will be achieved. Lineage accounts for forfeitures of RSUs as they occur in determining stock-based compensation expense. For RSUs subject to a market condition, the grant-date fair value is estimated using a Monte Carlo valuation model. Lineage recognizes stock-based compensation expense for RSUs subject to market-based vesting conditions regardless of whether it becomes probable that the vesting conditions will be achieved, and stock-based compensation expense for such RSUs is not reversed if vesting does not actually occur. The Monte Carlo model is based on random projections of stock price paths and must be repeated numerous times to achieve a probabilistic assessment.

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

*Recently Issued Accounting Pronouncements Not Yet Adopted*

The following recently issued accounting pronouncement that is not yet effective should be read in conjunction with the recently issued accounting pronouncements discussed in the 2021 10-K.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. ASU 2016-13 is intended to provide financial statement users with more decision-useful information about the expected credit losses on financial instruments and other commitments and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. ASU 2016-13 is effective for Lineage beginning January 1, 2023. Lineage has not yet completed its assessment of the impact of the new standard on its condensed consolidated financial statements.

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*. This ASU provides optional guidance for a limited period of time to ease the burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting. This would apply to companies meeting certain criteria that have contracts, hedging relationships and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. This standard is effective for us immediately and may be applied prospectively to contract modifications made and hedging relationships entered into or evaluated on or before December 31, 2022. We are currently assessing the impact the new guidance will have on our consolidated financial statements and disclosures.

**3. Revenue**

Our disaggregated revenues were as follows for the periods presented (in thousands):

| | Three Months Ended March 31, | |
|---|---|---|
| | **2022** | **2021** |
| Royalties | $ 372 | $ 293 |
| Grant revenues | | |
| Israel Innovation Authority | $ - | $ 98 |
| Total grant revenues | - | 98 |
| Revenues under collaborative agreements | | |
| Upfront license fees | $ 4,865 | $ - |
| Total revenues under collaborative agreements | 4,865 | - |
| Total revenue | $ 5,237 | $ 391 |

During the three months ended March 31, 2022, we recognized $5.2 million in total revenue, of which $4.9 million was recognized in collaboration revenues related to the $50.0 million upfront licensing payment from Roche, which was included in deferred revenues at December 31, 2021. Under the Roche collaboration, we are recognizing the upfront licensing payment utilizing an input method of costs incurred over total estimated costs to be incurred. There was no revenue related to new license agreements granted during the period.

Accounts receivable and other receivable, net, and deferred revenues (contract liabilities) from contracts with customers, including collaboration partners, consisted of the following (in thousands):

| | March 31, 2022 | December 31, 2021 |
|---|---|---|
| | (unaudited) | |
| Accounts receivable and other receivable, net [1][2] | $ 323 | $ 50,640 |
| Deferred revenues [2] | 45,600 | 50,500 |

(1) Accounts receivable and other receivable, net, decreased primarily due to the receipt of the $50.0 million upfront payment under the Roche Agreement, received during the three months ended March 31, 2022. See Note 14.

(2) Excludes government grants as Lineage has determined government grants are outside the scope of ASU 2014-09 - Revenue from Contracts with Customers (Topic 606).

As of March 31, 2022, the amounts in the transaction price of our contracts with customers, including collaboration partners, and allocated goods and services not yet provided were $47.3 million, of which $45.6 million has been collected and is reported as deferred revenues, and $1.7 million relates to unfulfilled commitments. The unfulfilled commitments are estimated to be delivered by the end of the second quarter of 2023. Of the total deferred revenues of $45.6 million, approximately $14.8 million is expected to be recognized within the next 12 months.

**4. Marketable Equity Securities**

As of March 31, 2022, Lineage owned 1.1 million shares of OncoCyte common stock, which had a fair value of $1.7 million as of that date, based on the closing price of OncoCyte common stock of $1.49 per share on that date.

As of December 31, 2021, Lineage owned 1.1 million shares of OncoCyte common stock, which had a fair value of $2.4 million as of that date, based on the closing price of OncoCyte common stock of $2.17 per share on that date.

For the quarter ended March 31, 2022, Lineage recorded a net unrealized loss on marketable equity securities of $0.7 million related to changes in fair market value of OncoCyte common stock price during the quarter.

For the quarter ended March 31, 2021, Lineage recorded a realized gain of $6.0 million from sales of OncoCyte shares Lineage made during the quarter. Lineage also recorded a net unrealized gain on marketable equity securities of $1.2 million related to changes in fair market value of OncoCyte common stock price during the quarter.

All share prices are determined based on the closing price of OncoCyte common stock on the NYSE American on the last day of the applicable quarter, or the last day of trading of the applicable quarter, if the last day of a quarter fell on a weekend.

**5. Property and Equipment, Net**

At March 31, 2022 and December 31, 2021, property and equipment, net was comprised of the following (in thousands):

| | March 31, 2022 | December 31, 2021 |
|---|---|---|
| | (unaudited) | |
| Equipment, furniture and fixtures | $ 3,459 | $ 3,472 |
| Leasehold improvements | 2,544 | 2,539 |
| Right-of-use assets | 4,132 | 4,163 |
| Accumulated depreciation and amortization | (5,587) | (5,302) |
| Property and equipment, net | $ 4,548 | $ 4,872 |

Property and equipment, net at March 31, 2022 and December 31, 2021, includes $79,000 in financing leases, which were fully amortized.

Depreciation and amortization expense amounted to $150,000 and $174,000 for the three months ended March 31, 2022 and 2021, respectively.

**6. Goodwill and Intangible Assets, Net**

At March 31, 2022 and December 31, 2021, goodwill and intangible assets, net consisted of the following (in thousands):

| | March 31, 2022 | December 31, 2021 |
|---|---|---|
| | (unaudited) | |
| Goodwill [1] | $ 10,672 | $ 10,672 |
| Intangible assets: | | |
| Acquired IPR&D - OPC1 (from the Asterias Merger) [2] | $ 31,700 | $ 31,700 |
| Acquired IPR&D - VAC (from the Asterias Merger) [2] | 14,840 | 14,840 |
| Intangible assets subject to amortization: | | |
| Acquired patents | 18,953 | 18,953 |
| Acquired royalty contracts [3] | 650 | 650 |
| Total intangible assets | 66,143 | 66,143 |
| Accumulated amortization [4] | (19,354) | (19,321) |
| Intangible assets, net | $ 46,789 | $ 46,822 |

(1) Goodwill represents the excess of the purchase price over the fair value of the net tangible and identifiable intangible assets acquired and liabilities assumed in the Asterias Merger, see Note 14 for further discussion on the Asterias Merger.

(2) Asterias had two in-process research and development ("IPR&D") intangible assets that were valued at $46.5 million as part of the purchase price allocation that was performed in connection with the Asterias Merger. The fair value of these assets consisted of $31.7 million pertaining to the OPC1 program and $14.8 million pertaining to the VAC platform.

(3) Asterias had royalty cash flows under certain specific patent families it acquired from Geron Corporation ("Geron"). Such patents are expected to continue to generate revenue, are not used in the OPC1 or the VAC platform, and are considered to be separate long-lived intangible assets under ASC 805.

(4) As of March 31, 2022 acquired patents were fully amortized and the acquired royalty contracts had a remaining unamortized balance of approximately $249,000.

Lineage amortizes its intangible assets over an estimated period of 5 to 10 years on a straight-line basis. Lineage recognized approximately $32,000 and $112,000 amortization expense of intangible assets during the three months ended March 31, 2022 and 2021, respectively.

Amortization of intangible assets for periods subsequent to March 31, 2022 is as follows (in thousands):

| Year Ended December 31, | Amortization Expense |
|---|---|
| 2022 | $ 97 |
| 2023 | 130 |
| 2024 | 22 |
| Total | $ 249 |

**7. Accounts Payable and Accrued Liabilities**

At March 31, 2022 and December 31, 2021, accounts payable and accrued liabilities consisted of the following (in thousands):

| | March 31, 2022 | December 31, 2021 |
|---|---|---|
| | (unaudited) | |
| Accounts payable | $ 2,956 | $ 3,543 |
| Accrued compensation | 1,586 | 2,162 |
| Accrued liabilities [(1)] | 4,337 | 22,086 |
| Other current liabilities | 78 | 178 |
| Total | $ 8,957 | $ 27,969 |

(1) The decrease in accrued liabilities was due to a $21.0 million payment by Lineage in accordance with its obligations related to the Roche Agreement (see Note 14), offset with accrual of litigation settlement amount of $3.5 million (see Note 15).

**8. 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 for identical assets or liabilities in active markets.
- Level 2 – Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- 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.

We have not transferred any instruments between the three levels of the fair value hierarchy.

We measure our money market fund, marketable equity securities and our liability classified warrants at fair value on a recurring basis. The fair values of such assets were as follows for March 31, 2022 and December 31, 2021 (in thousands):

| | | Fair Value Measurements Using | | |
|---|---|---|---|---|
| | Balance at March 31, 2022 | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
| Assets: | | | | |
| Money market fund [(1)] | $ 73,328 | $ 73,328 | $ - | $ - |
| Marketable equity securities | 1,882 | 1,882 | - | - |
| Liabilities: | | | | |
| Warrants to purchase Cell Cure ordinary shares | 6 | - | - | 6 |

| | Balance at December 31, 2021 | Fair Value Measurements Using | | |
|---|---|---|---|---|
| | | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
| Assets: | | | | |
| Money market fund [1] | $ 52,324 | $ 52,324 | $ - | $ - |
| Marketable equity securities | 2,616 | 2,616 | - | - |
| Liabilities: | | | | |
| Warrants to purchase Cell Cure ordinary shares | 227 | - | - | 227 |

(1) Included in cash and cash equivalents in the accompanying condensed consolidated balance sheet.

In determining the fair value of the warrants to purchase ordinary shares of Cell Cure, Lineage utilizes a Black-Scholes pricing model that maximizes the use of observable inputs and minimizes the use of unobservable inputs to the extent possible, and also considers counterparty credit risk in its assessment of fair value. The significant unobservable inputs used in the fair value measurement of such warrants are volatility and share value. A significant increase or decrease in these inputs could result in a significantly higher or lower fair value measurements.

The following table sets forth the establishment of the fair value of these warrants, as well as a summary of the changes in the fair value and other adjustments (in thousands):

| | Cell Cure Warrants |
|---|---|
| Balance as of December 31, 2021 | $ 227 |
| Change in fair value and other adjustments | (221) |
| Expiration of warrants | - |
| Balance as of March 31, 2022 | $ 6 |

Lineage's marketable equity securities includes the shares of stock of OncoCyte and HBL that Lineage owns. Both of these securities have readily determinable fair values quoted on the NYSE American or TASE stock exchanges. These securities are measured at fair value and reported as current assets on the accompanying condensed consolidated balance sheets based on the closing trading price of the security as of the date being presented.

The fair value of Lineage's assets and liabilities, which qualify as financial instruments under FASB guidance regarding disclosures about fair value of financial instruments, approximate the carrying amounts presented in the accompanying consolidated balance sheets. The carrying amounts of accounts receivable, prepaid expenses and other current assets, accounts payable, accrued expenses and other current liabilities approximate fair values because of the short-term nature of these items.

**9. Related Party Transactions**

In connection with the putative shareholder class action lawsuits filed in February 2019 and October 2019 challenging the Asterias Merger (see Note 14), Lineage agreed to pay the expenses for the legal defense of Neal Bradsher, a member of the Lineage board of directors, Broadwood Partners, L.P., a shareholder of Lineage, and Broadwood Capital, Inc., which serves as the general partner of Broadwood Partners, L.P., all of which were named defendants in the lawsuits, prior to being dismissed. Through March 31, 2022, Lineage has incurred a total of approximately $620,000 in legal expenses on behalf of the foregoing parties.

**10. Shareholders' Equity**

*Preferred Shares*

Lineage is authorized to issue 2,000,000 preferred shares, no par value. The preferred shares may be issued in one or more series as the Lineage board of directors may determine by resolution. The Lineage board of directors is authorized to fix the number of shares of any series of preferred shares and to determine or alter the rights, preferences, privileges, and restrictions granted to or imposed on the preferred shares as a class, or upon any wholly unissued series of any preferred shares. The Lineage board of directors may, by resolution, increase or decrease (but not below the number of shares of such series then outstanding) the number of shares of any series of preferred shares subsequent to the issue of shares of that series. As of March 31, 2022 and December 31, 2021, there were no preferred shares issued or outstanding.

*Common Shares*

Lineage is authorized to issue 250,000,000 common shares, no par value. As of March 31, 2022 and December 31, 2021, there were 169,727,395 and 169,477,347 common shares issued and outstanding, respectively.

*At The Market Offering Program*

In May 2020, Lineage entered into a Controlled Equity Offering$^{SM}$ Sales Agreement (the "Sales Agreement") with Cantor Fitzgerald & Co., as sales agent ("Cantor Fitzgerald"), pursuant to which Lineage may sell its common shares from time to time through an "at the market offering" ("ATM") program under the Sales Agreement.

In March 2021, Lineage filed a prospectus supplement with the SEC in connection with the offer and sale of $25.0 million of common shares through the ATM program under the Sales Agreement ("March 2021 Prospectus Supplement").

In December 2021, Lineage filed a prospectus supplement with the SEC in connection with the offer and sale of up to $64.1 million its common shares (which included $14.1 million of its common shares which then remained unsold under the March 2021 Prospectus Supplement) through the ATM program under the Sales Agreement ("December 2021 Prospectus Supplement"). No further sales will be made under the March 2021 Prospectus Supplement.

As of March 31, 2022, Lineage had sold 108,200 common shares under the December 2021 Prospectus Supplement at a weighted average price per share of $2.55 for gross proceeds of $0.3 million. As of March 31, 2022, $63.8 million remained available for sale under the December 2021 Prospectus Supplement.

The shares offered under the December 2021 Prospectus Supplement are registered pursuant to Lineage's effective shelf registration statement on Form S-3 (File No. 333-237975), which was filed with the SEC on May 1, 2020 and declared effective on May 8, 2020, and Lineage's effective shelf registration statement on Form S-3 (File No. 333-254167), which was filed with the SEC on March 5, 2021 and declared effective on March 19, 2021.

Lineage agreed to pay Cantor Fitzgerald a commission of 3.0% of the aggregate gross proceeds from the sale of shares under the Sales Agreement, reimburse its legal fees and disbursements, and provide Cantor Fitzgerald with customary indemnification and contribution rights. The Sales Agreement may be terminated by Cantor Fitzgerald or Lineage at any time upon notice to the other party, or by Cantor Fitzgerald at any time in certain circumstances, including the occurrence of a material and adverse change in Lineage's business or financial condition that makes it impractical or inadvisable to market the shares or to enforce contracts for the sale of the shares.

*Reconciliation of Changes in Shareholders' Equity*

The following tables document the changes in shareholders' equity for the three months ended March 31, 2022 and 2021 (unaudited and in thousands):

| | Preferred Shares | | Common Shares | | | | Accumulated Other | |
|---|---|---|---|---|---|---|---|---|
| | Number of Shares | Amount | Number of Shares | Amount | Accumulated Deficit | Noncontrolling Interest/ (Deficit) | Comprehensive Income/(Loss) | Total Shareholders' Equity |
| **BALANCE AT DECEMBER 31, 2021** | - | $ - | 169,477 | $ 434,529 | $ (337,097) | $ (1,323) | $ (5,211) | $ 90,898 |
| Shares issued upon vesting of restricted stock units, net of shares retired to pay employees' taxes | - | - | 10 | (8) | - | - | - | (8) |
| Shares issued upon exercise of stock options | - | - | 240 | 189 | | | | 189 |
| Subsidiary warrant exercise | - | - | - | 2 | | | | 2 |
| Stock-based compensation | - | - | - | 1,106 | - | - | - | 1,106 |
| Foreign currency translation gain | - | - | - | - | - | - | 124 | 124 |
| NET LOSS | - | - | - | - | (7,087) | (6) | - | (7,093) |
| **BALANCE AT MARCH 31, 2022** | - | $ - | 169,727 | $ 435,818 | $ (344,184) | $ (1,329) | $ (5,087) | $ 85,218 |

| | Preferred Shares | | Common Shares | | | | Accumulated Other | |
|---|---|---|---|---|---|---|---|---|
| | Number of Shares | Amount | Number of Shares | Amount | Accumulated Deficit | Noncontrolling Interest/ (Deficit) | Comprehensive Income/(Loss) | Total Shareholders' Equity |
| **BALANCE AT DECEMBER 31, 2020** | - | $ - | 153,096 | $ 393,944 | $ (294,078) | $ (1,072) | $ (3,667) | $ 95,127 |
| Shares issued through ATM | - | - | 7,941 | 19,008 | - | - | - | 19,008 |
| Shares issued for services | - | - | 78 | 202 | - | - | - | 202 |
| Shares issued upon vesting of restricted stock units, net of shares retired to pay employees' taxes | - | - | 10 | (12) | - | - | - | (12) |
| Shares issued upon exercise of stock options | - | - | 942 | 1,751 | | | | 1,751 |
| Financing related fees | - | - | - | (173) | - | - | - | (173) |
| Stock-based compensation | - | - | - | 539 | - | - | - | 539 |
| Foreign currency translation gain | - | - | - | - | - | - | 1,576 | 1,576 |
| NET LOSS | - | - | - | - | (1,416) | (32) | - | (1,448) |
| **BALANCE AT MARCH 31, 2021** | - | $ - | 162,067 | $ 415,259 | $ (295,494) | $ (1,104) | $ (2,091) | $ 116,570 |

*Warrants*

*Lineage Warrants - Liability Classified*

In March 2019, in connection with the Asterias Merger (see Note 14), Lineage assumed outstanding warrants issued by Asterias. As of March 31, 2021, 1,089,900 Lineage common shares were subject to such warrants. All such warrants expired unexercised in May 2021.

*Cell Cure Warrants - Liability Classified*

In July 2017, Cell Cure issued to HBL a warrant to purchase 24,566 ordinary shares of Cell Cure at an exercise price of $40.54 per share and that expires in July 2022. In March 2022, 50 ordinary shares of Cell Cure were issued to HBL upon its exercise of a portion of that warrant. Also in March 2022, HBL provided to Cell Cure a notice of exercise with respect to an additional 50 warrant shares of Cell Cure via a net issue exercise.

Cell Cure issued warrants to purchase 13,738 of its ordinary shares to consultants. In October 2020, warrants to purchase 11,738 ordinary shares with an exercise price of $32.02 to $40.02 per share were exercised on a cashless basis. The expense related to the cashless exercise was approximately $44,000 and it was recorded as other income/(expense), net on the statements of operations. The remaining outstanding warrants to purchase 2,000 ordinary shares have an exercise price of $40.00 and expire in January 2024.

**11. Stock-Based Awards**

*Equity Incentive Plan Awards*

In September 2021, our shareholders approved the Lineage Cell Therapeutics, Inc. 2021 Equity Incentive Plan (the "2021 Plan"), which became effective upon such approval. The 2021 Plan provides for the grant of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock awards, RSUs, and other stock awards. All of our employees (including those of our affiliates), non-employee directors and consultants are eligible to participate in the 2021 Plan.

Subject to adjustment for certain changes in our capitalization, the aggregate number of our common shares that may be issued under the 2021 Plan will not exceed the sum of (i) 15,000,000 shares and (ii) the number of shares subject to awards granted under the Lineage Cell Therapeutics Inc. 2012 Equity Incentive Plan (the "2012 Plan") that were outstanding when the 2021 Plan became effective and are not issued because such award expires or otherwise terminates without all the shares covered by award having been issued. As of March 31, 2022, there were 9,628,055 shares available for grant under the 2021 Plan.

As a result of the approval of the 2021 Plan by our shareholders, no additional awards will be granted under the 2012 Plan or the Asterias 2013 Equity Incentive Award (the "Asterias Equity Plan").

A summary of activity under the 2021 Plan is as follows (in thousands, except per share amounts):

| | Number of Options Outstanding | Number of RSUs Outstanding | Weighted Average Exercise Price |
|---|---|---|---|
| December 31, 2021 | - | - | $ - |
| Options granted | 5,304 | - | 1.40 |
| Restricted stock units granted [(1)] | - | 994 | - |
| March 31, 2022 | 5,304 | 994 | $ 1.40 |
| Options exercisable at March 31, 2022 | - | | $ - |

(1) On February 11, 2022, Lineage granted 694,424 RSUs to certain employees, including the Company's executive officers, to further align management with the achievement of certain development milestones under the Roche Agreement. For each RSU, half of the common shares subject to the RSU will vest in four equal annual installments beginning on the first anniversary of the grant date. The other half of the common shares will vest in connection with the achievement of certain development milestones set forth in the Roche Agreement. Additionally, on March 10, 2022, Lineage granted 300,000 RSUs to Brian Culley, its Chief Executive Officer. 100,000 of these RSUs will vest on or prior to March 9, 2023, and 100,000 will vest on each of the second and third anniversaries of such date, upon the achievement of certain per share performance targets, calculated based on the trailing 20-day volume weighted average price of the Company's common shares as of the date of determination.

A summary of activity under the 2012 Plan and other stock option awards granted outside of the 2012 Plan is as follows (in thousands, except per share amounts):

| | Number of Options Outstanding | Number of RSUs Outstanding | Weighted Average Exercise Price |
|---|---|---|---|
| December 31, 2021 | 14,643 | 31 | $ 1.84 |
| Restricted stock units vested | - | (16) | - |
| Options exercised | (240) | - | 0.79 |
| Options expired/forfeited/cancelled | (41) | - | 1.50 |
| March 31, 2022 | 14,362 | 15 | $ 1.86 |
| Options exercisable at March 31, 2022 | 7,433 | | $ 1.76 |

A summary of activity under the Asterias Equity Plan as of March 31, 2022 is as follows (in thousands, except per share amounts):

| | Number of Options Outstanding | Weighted Average Exercise Price |
|---|---|---|
| December 31, 2021 | 241 | $ 1.57 |
| Options forfeited | (241) | 1.57 |
| March 31, 2022 | - | $ - |
| Options exercisable at March 31, 2022 | - | $ - |

*Stock-based compensation expense*

The fair value of each stock option is estimated on the date of grant using a Black-Scholes option pricing model applying the weighted-average assumptions noted in the following table:

| | Three Months Ended March 31, (unaudited) | |
|---|---|---|
| | 2022 | 2021 |
| Expected life (in years) | 6.25 | 6.25 |
| Risk-free interest rates | 1.95% | 1.06% |
| Volatility | 73.4% | 73.0% |
| Dividend yield | -% | -% |

Operating expenses include stock-based compensation expense as follows (in thousands):

| | Three Months Ended March 31, (unaudited) | |
|---|---|---|
| | 2022 | 2021 |
| Research and development | $ 215 | $ 134 |
| General and administrative | 891 | 405 |
| Total stock-based compensation expense | $ 1,106 | $ 539 |

As of March 31, 2022, total unrecognized compensation costs related to unvested stock options and unvested restricted stock units under Lineage's 2012 and 2021 Plans were $12.9 million, which is expected to be recognized as expense over a weighted average period of approximately 3.0 years.

**12. Income Taxes**

The provision for income taxes for interim periods is generally determined using an estimated annual effective tax rate as prescribed by ASC 740-270, *Income Taxes*, *Interim Reporting*. The effective tax rate may be subject to fluctuations during the year as new information is obtained, which may affect the assumptions used to estimate the annual effective tax rate, including factors such as valuation allowances and changes in valuation allowances against deferred tax assets, the recognition or de-recognition of tax benefits related to uncertain tax positions, if any, and changes in or the interpretation of tax laws in jurisdictions where Lineage conducts business. ASC 740-270 also states that if an entity is unable to reliably estimate some or a part of its ordinary income or loss, the income tax provision or benefit applicable to the item that cannot be estimated shall be reported in the interim period in which the item is reported.

For items that Lineage cannot reliably estimate on an annual basis (principally unrealized gains or losses generated by changes in the market price of OncoCyte common stock), Lineage uses the actual year to date effective tax rate rather than an estimated annual effective tax rate to determine the tax effect of each item, including the use of all available net operating losses and other credits or deferred tax assets.

The market value of the shares of OncoCyte common stock Lineage holds creates a deferred tax liability ("DTL") to Lineage based on the closing prices of the shares, less Lineage's tax basis in the shares. The DTL generated by the OncoCyte shares that Lineage holds as of March 31, 2022 is a source of future taxable income to Lineage, as prescribed by ASC 740-10-30-17, that will more likely than not result in the realization of its deferred tax assets to the extent of the DTL. This DTL is determined based on the closing price of the OncoCyte common stock on March 31, 2022. Due to the inherent unpredictability of future prices of those shares, Lineage cannot reliably estimate or project those DTLs on an annual basis. Therefore, the DTL pertaining to OncoCyte shares, determined based on the actual closing prices on the last stock market trading day of the applicable accounting period, and the related impacts to the valuation allowance and deferred tax asset changes, are recorded in the accounting period in which they occur.

A valuation allowance is provided when it is more likely than not that some portion of the deferred tax assets will not be realized. Lineage established a full valuation allowance as of December 31, 2018 due to the uncertainty of realizing future tax benefits from its net operating loss carryforwards and other deferred tax assets, including foreign net operating losses generated by its subsidiaries.

In December 2021, Lineage and its subsidiary, Cell Cure, entered into a Collaboration and License Agreement with Roche, wherein Lineage granted to Roche exclusive worldwide rights to develop and commercialize RPE cell therapies. Roche has paid Lineage a $50.0 million upfront payment, which was received in January of 2022 (see further discussion in Note 14).

During December 2021, in an intercompany transaction, Lineage acquired the economic rights to Cell Cure's interest in certain intellectual property. This transaction generated a gain to Cell Cure of $31.7 million which was fully offset by net operating loss carryforwards in Israel. For book and California income tax purposes, this transaction eliminates in consolidation. For federal income tax purposes, the activities of Lineage's foreign subsidiaries are not included in the consolidated tax return. However, under the regulations related to global intangible low-taxed income ("GILTI"), the profits of Lineage's foreign subsidiaries may be included. See further discussion below.

Beginning in 2018, the Tax Cuts and Jobs Act of 2017 (the "2017 Tax Act") subjects a U.S. stockholder to 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, 2021, Lineage's combined foreign entities generated a profit arising from intercompany transactions. As a result, there was an inclusion of $24.8 million for GILTI purposes in 2021. The resulting net income for federal income tax purposes was fully offset by the federal net operating loss carryforwards of the foreign entities.

For years beginning after December 31, 2021, the 2017 Tax Act requires companies to capitalize their research and experimentation expenditures as defined under Section 174 and amortize those expenditures on a straight-line bases over a period of 5 years (15 years for foreign entities). Previously the Company was able to immediately expense such costs. It is possible that Congress will defer or eliminate the ultimate implementation of this provision. The Company has sufficient federal NOL carryforwards to offset the impact of this provision.

For the three months ended March 31, 2022 and 2021, Lineage did not record a deferred tax benefit.

**13. Supplemental Cash Flow Information**

Supplemental disclosure of cash flow information for the three months ended March 31, 2022, and 2021 is as follows (in thousands):

| | Three Months Ended March 31, (unaudited) | |
|---|---|---|
| | 2022 | 2021 |
| Cash paid during period for interest | $ 5 | $ 3 |

**14. Commitments and Contingencies**

*Real Property Leases*

*Carlsbad Lease*

In May 2019, Lineage entered into a lease for approximately 8,841 square feet of rentable space in an office park in Carlsbad, California for a term that commenced on August 1, 2019 and expires on October 31, 2022. As security for the performance of its obligations under the lease, Lineage provided the landlord with a security deposit of $17,850.

Base rent was abated for months two through five of the lease. Base rent through August 1, 2019 was based upon a deemed rentable area of 7,000 square feet. Since August 1, 2021, base rent has been $23,959 per month and increases by 3% on August 1, 2022.

In addition to base rent, Lineage pays a pro rata portion of increases in certain expenses, including real property taxes, utilities (to the extent not separately metered to the leased space) and the landlord's operating expenses, over the amounts of those expenses incurred by the landlord.

*Alameda Leases and Alameda Sublease*

In December 2015, Lineage entered into leases of office and laboratory space located in two buildings in Alameda, California (the "Alameda Leases") comprised of 22,303 square feet (the "1010 Atlantic Premises") and 8,492 square feet (the "1020 Atlantic Premises"). As security for its obligations under the Alameda Leases, Lineage provided the landlord with a security deposit of approximately $424,000, which was reduced to $78,000 in January 2019 in accordance with the terms of the Alameda Leases, and which was returned in full to Lineage in March 2021.

Base rent under the Alameda Leases beginning on February 1, 2020 was $72,676 per month with annual increases of approximately 3%. In addition to base rent, Lineage pays a pro rata portion of increases in certain expenses, including real property taxes, utilities (to the extent not separately metered to the leased space) and the landlord's operating expenses, over the amounts of those expenses incurred by the landlord.

In April 2020, Lineage subleased 10,000 square feet in the 1010 Atlantic Premises to Industrial Microbes, Inc. ("Industrial Microbes"). Base rent under the sublease was $28,000 per month with annual increases of approximately 3%. Base rent for the first month was abated. In addition to base rent and utilities, Industrial Microbes paid a pro-rata portion of increases in operating expenses, after an abatement period of one year

On September 11, 2020, Lineage entered into an agreement with the landlord pursuant to which the lease for the 1020 Atlantic Premises was terminated effective as of August 31, 2020, and the lease for the 1010 Atlantic Premises was terminated effective as of September 30, 2020. In connection with the termination of the Alameda Leases, Lineage entered into a sublease for approximately 2,432 square feet of the 1010 Atlantic Premises for a term that commenced on October 1, 2020 and ends on January 31, 2023. Base rent is $14,592 per month with annual increases of 3% each October 1 during the term. Base rent for the first month was abated. Lineage paid a security deposit of $16,000; this amount is included in deposits and other long-term assets as of March 31, 2022 (see Note 2).

*Cell Cure Leases*

Cell Cure leases 728.5 square meters (approximately 7,842 square feet) of office and laboratory space in Jerusalem, Israel under a lease that expires December 31, 2025, with an option to extend the lease for five years (the "Original Cell Cure Lease"). Base monthly rent is NIS 39,776 (approximately $12,200 per month). In addition to base rent, Cell Cure pays a pro-rata share of real property taxes and certain costs related to the operation and maintenance of the building in which the leased premises are located.

In January 2018, Cell Cure entered into another lease for an additional 934 square meters (approximately 10,054 square feet) of office space in the same facility in Jerusalem, Israel that expires on December 31, 2025, with two five-year extension options (the "January 2018 Lease"). The January 2018 Lease commenced on April 1, 2018 and included a leasehold improvement construction allowance of up to NIS 4,000,000 (approximately up to US $1.1 million). The leasehold improvements were completed in December 2018 and the entire allowance was used. Combined base rent and construction allowance payments are NIS 93,827 per month (approximately $26,000 per month). In December 2018, Cell Cure provided a $420,000 security deposit to the landlord to be held as restricted cash during the term of the January 2018 Lease, which is included in deposits and other long-term assets on the consolidated balance sheet as of March 31, 2022.

In November 2021, Cell Cure entered into a lease for an additional 133 square meters (approximately 1,432 square feet) of office space in the same facility in Jerusalem, Israel that expires on December 31, 2025, with one five year and one approximate three-year extension options. This lease commenced on December 1, 2021, with a twelve-month base rent of NIS 11,880 (approximately US $3,757). On November 1, 2022, the base monthly rent increases to NIS 12,494 (approximately US $3,951).

*Supplemental Information - Leases*

Supplemental cash flow information related to leases is as follows (in thousands):

| | Three Months Ended March 31, | |
|---|---|---|
| | **2022** | **2021** |
| **Cash paid for amounts included in the measurement of lease liabilities:** | | |
| Operating cash flows from operating leases | $ 255 | $ 208 |
| Operating cash flows from financing leases | 5 | 3 |
| Financing cash flows from financing leases | 8 | - |
| | | |
| **Right-of-use assets obtained in exchange for lease obligations:** | | |
| Operating leases | 33 | - |

Supplemental balance sheet information related to leases was as follows (in thousands, except lease term and discount rate):

| | **March 31, 2022** | **December 31, 2021** |
|---|---|---|
| **Operating leases** | | |
| Right-of-use assets, net | $ 2,155 | $ 2,372 |
| | | |
| Right-of-use lease liabilities, current | $ 719 | $ 801 |
| Right-of-use lease liabilities, noncurrent | 1,781 | 1,941 |
| Total operating lease liabilities | $ 2,500 | $ 2,742 |
| | | |
| **Financing leases** | | |
| Right-of-use assets, net | $ 28 | $ 36 |
| | | |
| Lease liabilities, current | $ 13 | $ 13 |
| Lease liabilities, noncurrent | 24 | 23 |
| Total finance lease liabilities | $ 37 | $ 36 |
| | | |
| Other current liabilities | $ 18 | $ 17 |
| Long-term liabilities | 2 | 7 |
| Total finance lease liabilities | $ 20 | $ 24 |
| | | |
| **Weighted average remaining lease term** | | |
| Operating leases | 3.4 years | 3.5 years |
| Finance leases | 2.0 years | 2.2 years |
| **Weighted average discount rate** | | |
| Operating leases | 7.7% | 7.7% |
| Finance leases | 5.6% | 5.7% |

Future minimum lease commitments are as follows as of March 31, 2022 (in thousands):

| | Operating Leases | Finance Leases |
|---|---|---|
| **Year Ending December 31,** | | |
| 2022 | $ 763 | $ 24 |
| 2023 | 587 | 22 |
| 2024 | 556 | 14 |
| 2025 | 525 | - |
| 2026 | 440 | - |
| | | |
| Total lease payments | $ 2,871 | $ 60 |
| Less imputed interest | (371) | (3) |
| Total | $ 2,500 | $ 57 |

*Collaboration Agreements*

*Roche Agreement*

In December 2021, Lineage, its subsidiary, Cell Cure, and F. Hoffmann-La Roche Ltd and Genentech, Inc., a member of the Roche Group (collectively, "Roche") entered into a Collaboration and License Agreement (the "Roche Agreement"), wherein Lineage granted to Roche exclusive worldwide rights to develop and commercialize RPE cell therapies, including its proprietary cell therapy known as OpRegen, for the treatment of ocular disorders, including geographic atrophy secondary to age-related macular degeneration.

Under the terms of the Roche Agreement, Roche agreed to pay Lineage a $50.0 million upfront payment and Lineage is eligible to receive up to an additional $620.0 million in certain developmental, regulatory and commercialization milestone payments. Lineage is also eligible to receive tiered double-digit percentage royalties on net sales of OpRegen. All regulatory and commercial milestone payments, and royalty payments, are subject to the existence of certain intellectual property rights that cover OpRegen at the time such payments would otherwise become due, and the royalties on net sales of OpRegen are subject to financial offsets based on the existence of competing products. Roche has assumed responsibility for further clinical development and commercialization of OpRegen®. Lineage is responsible for completing activities related to the ongoing clinical study, for which enrollment is complete, and performing certain manufacturing and process development activities.

Unless earlier terminated by either party, the Agreement will expire on a product-by-product and country-by-country basis upon the expiration of all of Roche's payment obligations under the Agreement. Roche may terminate the Agreement in its entirety, or on a product-by-product or country-by-country basis, at any time with advance written notice. Either party may terminate the Agreement in its entirety with written notice for the other party's material breach if such party fails to cure the breach. Either party also may terminate the Agreement in its entirety upon certain insolvency events involving the other party.

In January 2022, Lineage received the $50.0 million upfront payment from Roche. Subsequently, Lineage, via Cell Cure, paid $12.1 million to the Israel Innovation Authority (the "IIA"), and $8.9 million to Hadasit Medical Research Services and Development Ltd. ("Hadasit"). Such payments were made in accordance with obligations under the Innovation Law and under the terms of Cell Cure's agreements with Hadasit discussed below. The payment to Hadasit was reduced by $1.9 million in accordance with the provisions of such agreements discussed below that reduce the sublicensing fee payable to Hadasit for costs related to Lineage's performance obligations under the Roche Agreement. To the extent such costs are not incurred within five years after the execution of the Roche Agreement, Cell Cure will be required to pay Hadasit 21.5% of the amount of costs not incurred.

*ITI Collaboration Agreement*

Under Lineage's collaborative agreement with ITI, Lineage agreed to perform up to approximately $2.2 million worth of certain research, development, manufacturing, and oversight activities related to a VAC-CMV product candidate. ITI will reimburse Lineage for these costs and full-time employee costs for the manufacturing of the VAC-CMV product candidate.

*Agreements with Hadasit and IIA*

The OpRegen program has been supported in part with licenses to technology obtained from Hadasit, the technology transfer company of Hadassah Medical Center, and through a series of research grants from IIA, an independent agency created to address the needs of global innovation ecosystems. A subset of the intellectual property underlying OpRegen was originally generated at Hadassah Medical Center and licensed to Cell Cure for further development.

Under the Encouragement of Research, Development and Technological Innovation in the Industry Law 5744, and the regulations, guidelines, rules, procedures and benefit tracks thereunder (collectively, the "Innovation Law"), annual research and development programs that meet specified criteria and were approved by a committee of the IIA were eligible for grants. The grants awarded were typically up to 50% of the project's expenditures, as determined by the IIA committee and subject to the benefit track under which the grant was awarded.

The terms of the grants under the Innovation Law generally require that the products developed as part of the programs under which the grants were given be manufactured in Israel. The know-how developed thereunder may not be transferred outside of Israel unless prior written approval is received from the IIA. Transfer of IIA-funded know-how outside of Israel is subject to approval and payment of a redemption fee to the IIA calculated according to formulas provided under the Innovation Law. In November 2021, the IIA research committee approved an application made by Cell Cure with respect to the grant of an exclusive license and transfer of the technological know-how for OpRegen to Roche. Under the provisions for the redemption fee, Lineage is obligated to pay the IIA approximately 24.3% of the upfront, milestone, and royalty payments which may be received under the Roche Agreement, up to an aggregate cap on all payments, such cap growing over time via interest accrual until paid in full. As of March 31, 2022, the aggregate cap amount was approximately $90.6 million.

Pursuant to the Second Amended and Restated License Agreement, dated June 15, 2017, between Cell Cure and Hadasit, as amended, and a certain letter agreement entered into on December 17, 2021, between the parties Hadasit is entitled to a sublicensing fee of 21.5% of the upfront payment (subject to certain reductions, including for costs related to Lineage's performance obligations under the Roche Agreement) and any milestone payments, and up to 50% of all royalty payments (subject to a maximum payment of 5% of net sales of products), Lineage receives under the Roche Agreement. The letter agreement generally terminates upon the termination of the Roche Agreement.

*Second Amendment to Clinical Trial and Option Agreement and License Agreement with Cancer Research UK*

In May 2020, Lineage and Asterias entered into a Second Amendment to Clinical Trial and Option Agreement (the "CTOA Amendment") with Cancer Research UK ("CRUK") and Cancer Research Technology Limited ("CRT"), which amends the Clinical Trial and Option Agreement entered into between Asterias, CRUK and CRT dated September 8, 2014, as amended September 8, 2014. Pursuant to the CTOA Amendment, Lineage assumed all obligations of Asterias and exercised early its option to acquire data generated in the Phase 1 clinical trial of VAC2 in non-small cell lung cancer being conducted by CRUK. CRUK will continue conducting the VAC2 study.

Lineage and CRT effectuated the option by simultaneously entering into a license agreement (the "CRT License Agreement") pursuant to which Lineage agreed to pay the previously agreed signature fee of £1,250,000 (approximately $1.6 million). In consideration of Lineage's agreement to exercise the option prior to completion of the study, the parties agreed to defer payment of the signature fee as follows: £500,000 was payable in September 2020, £500,000 was payable in February 2021 and £250,000 was payable in April 2021. For the primary licensed product for the first indication, the CRT License Agreement provides for milestone fees of up to £8,000,000 based upon initiation of a Phase 3 clinical trial and the filing for regulatory approval and up to £22,500,000 in sales-based milestones payments. Additional milestone fees and sales-based milestone payments would be payable for other products or indications, and mid-single-digit royalty payments are payable on sales of commercial products.

Either party may terminate the CRT License Agreement for the uncured material breach of the other party. CRT may terminate the CRT License Agreement in the case of Lineage's insolvency or if Lineage ceases all development and commercialization of all products under the CRT License Agreement.

*Litigation – General*

From time to time, we are subject to legal proceedings and claims in the ordinary course of business. While management presently believes that the ultimate outcome of these proceedings, individually and in the aggregate, will not materially harm our financial position, cash flows, or overall trends in results of operations, legal proceedings are subject to inherent uncertainties, and unfavorable rulings or outcomes could occur that have individually or in aggregate, a material adverse effect on our business, financial condition or operating results. Except as described below, we are not currently subject to any pending material litigation, other than ordinary routine litigation incidental to our business, as described above.

*Asterias Merger*

In November 2018, Lineage, Asterias Biotherapeutics, Inc. ("Asterias") and Patrick Merger Sub, Inc., a wholly owned subsidiary of Lineage, entered into an Agreement and Plan of Merger (the "Merger Agreement") whereby Lineage agreed to acquire all of the outstanding common stock of Asterias in a stock-for-stock transaction (the "Asterias Merger"). On March 7, 2019, the shareholders of each of Lineage and Asterias approved the Merger Agreement. On March 8, 2019, the Asterias Merger closed with Asterias surviving as a wholly owned subsidiary of Lineage. Lineage issued 24,695,898 common shares, including 58,085 shares issued in respect of restricted stock units issued by Asterias that immediately vested in connection with the closing of the Asterias Merger. The aggregate dollar value of such shares, based on the closing price of Lineage common shares on March 8, 2019, was $32.4 million. The total purchase price was $52.6 million.

In October 2019, a putative class action lawsuit was filed challenging the Asterias Merger. This action (captioned *Ross v. Lineage Cell Therapeutics, Inc., et al.*, C.A. No. 2019-0822) was filed in Delaware Chancery Court and names Lineage, the Asterias board of directors, one member of Lineage's board of directors, and certain stockholders of both Lineage and Asterias as defendants. The action was brought by a purported stockholder of Asterias, on behalf of a putative class of Asterias stockholders, and asserts breach of fiduciary duty and aiding and abetting claims under Delaware law. The complaint alleges, among other things, that the process leading up to the Asterias Merger was conflicted, that the Asterias Merger consideration was inadequate, and that the proxy statement filed by Asterias with the SEC omitted certain material information, which allegedly rendered the information disclosed materially misleading. The complaint seeks, among other things, that a class be certified, the recovery of monetary damages, and attorneys' fees and costs. In December 2019, the defendants moved to dismiss the complaint. In June 2020, a hearing on the motions to dismiss occurred. In September 2020, the Chancery Court denied the motion to dismiss as to Lineage and certain members of the Asterias board of directors, and it granted the motion to dismiss as to all other defendants. In October 2020, the remaining defendants filed an answer to the complaint. The parties are currently engaged in discovery. A five-day trial before the Chancery Court is currently scheduled for October 17-21, 2022.

In April 2022, the parties reached an agreement in principle to settle this litigation, which would result in payment to the putative class of approximately $10.7 million and dismissal of the lawsuit with prejudice and without any admission of liability or fault by defendants. Of such amount, Lineage expects to contribute approximately $3.5 million, with the balance to be paid by insurance. The proposed settlement is subject to the negotiation and execution of a settlement agreement and court approval thereof. Although the parties have reached an agreement in principle to settle, there is no assurance that a final settlement will be achieved and approved by the court. If a settlement is unable to be reached, then Lineage will continue to vigorously defend the lawsuit.

In accordance with ASC 450-20-25-2, *Contingencies*, Lineage has recorded an accrual for a liability associated with the proposed settlement, acknowledging that a liability is probable, and the amount of the loss is estimable. Additionally, in accordance with ASC 855-10-25-1, *Subsequent Events*, the Company's liability for the proposed settlement was recognized in the financial results since the agreement in principle to settle the litigation occurred after the balance sheet date.

*Employment Contracts*

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

*Indemnification*

In the normal course of business, Lineage may provide indemnifications of varying scope under Lineage's agreements with other companies or consultants, typically Lineage's clinical research organizations, investigators, clinical sites, suppliers and others. Pursuant to these agreements, Lineage 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 the use or testing of Lineage's products and services. Indemnification provisions could also cover third party infringement claims with respect to patent rights, copyrights, or other intellectual property pertaining to Lineage products and services. The term of these indemnification agreements will generally continue in effect after the termination or expiration of the particular research, development, services, or license agreement to which they relate. The potential future payments Lineage could be required to make under these indemnification agreements will generally not be subject to any specified maximum amount. Historically, Lineage has not been subject to any claims or demands for indemnification. Lineage also maintains various liability insurance policies that limit Lineage's financial exposure. As a result, Lineage believes the fair value of these indemnification agreements is minimal. Accordingly, Lineage has not recorded any liabilities for these agreements as of March 31, 2022, and 2021.

*Royalty Obligations and License Fees*

Lineage and its subsidiaries or affiliates are parties to certain licensing agreements with research institutions, universities and other parties for the rights to use those licenses and other intellectual property in conducting research and development activities. These licensing agreements provide for the payment of royalties by Lineage or the applicable party to the agreement on future product sales, if any. In addition, in order to maintain these licenses and other rights during the product development, Lineage or the applicable party to the contract must comply with various conditions including the payment of patent related costs and annual minimum maintenance fees.

As part of the Asterias Merger, Lineage acquired certain royalty revenues for cash flows that were generated under certain specific patent families that Asterias previously acquired from Geron. Asterias paid Geron a royalty for all royalty revenues received from these contracts. Lineage continues to make royalty payments to Geron for royalties generated from these patents.

**15. Subsequent Events**

*Asterias Litigation*

In April 2022, the parties reached an agreement in principle to settle this litigation, which would result in payment to the putative class of approximately $10.7 million and dismissal of the lawsuit with prejudice and without any admission of liability or fault by defendants. Of such amount, Lineage expects to contribute approximately $3.5 million, with the balance to be paid by insurance. The proposed settlement is subject to the negotiation and execution of a settlement agreement and court approval thereof. Although the parties have reached an agreement in principle to settle, there is no assurance that a final settlement will be achieved and approved by the court. If a settlement is unable to be reached, then Lineage will continue to vigorously defend the lawsuit.

**Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations**

The following discussion and analysis of financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and notes thereto included in this Report and our audited financial statements and notes thereto for the year ended December 31, 2021 included in our Annual Report on Form 10-K for the year ended December 31, 2021 ("2021 10-K"), filed with the Securities and Exchange Commission (the "SEC") on March 10, 2022. Past operating results are not necessarily indicative of results that may occur in future periods.

The following discussion includes forward-looking statements. See "Special Note Regarding Forward-Looking Statements," above. Forward-looking statements are not guarantees of future performance and our actual results may differ materially from those currently anticipated and from historical results depending upon a variety of factors, including, but not limited to, those discussed in Part I, Item 1A. Risk Factors of our 2021 10-K, and in our subsequent filings with the SEC, including any discussed in Part II, Item 1A of this Report under the heading "Risk Factors."

In this report, "we," "us," "our," "Lineage" or the "Company" refer collectively to Lineage Cell Therapeutics, Inc. and its wholly owned or majority owned subsidiaries, unless otherwise stated or the context otherwise requires. All information presented in this report is based on our fiscal year. Unless otherwise stated, references to particular years, quarters, months or periods refer to our fiscal years ending December 31 and the associated quarters, months and periods of those fiscal years.

**Company and Business Overview**

We are a clinical-stage biotechnology company developing novel cell therapies to address unmet medical needs. Our programs are based on our proprietary cell-based technology and associated development and manufacturing capabilities. From this platform, we design, develop, and manufacture specialized human cells with anatomical and physiological functions similar or identical to cells found naturally in the human body. These cells which we manufacture are created by developmental differentiation protocols that we apply to established and well-characterized, pluripotent, and self-renewing cell lines. These functional cells are transplanted into patients and are designed to (a) replace or support cells that are dysfunctional or absent due to degenerative disease or traumatic injury, or (b) help the body mount a more robust and effective immune response to cancer or infectious diseases.

Our strategy is to efficiently leverage our technology platform and development and manufacturing capabilities to develop and advance our cell therapy programs internally or in conjunction with strategic partners to further enhance their value. As one example, in December 2021, we entered into a Collaboration and License Agreement (the "Roche Agreement") with F. Hoffmann-La Roche Ltd and Genentech, Inc., a member of the Roche Group (collectively, "Roche"), wherein we granted to Roche exclusive worldwide rights to develop and commercialize retinal pigment epithelial ("RPE") cell therapies, including our proprietary cell therapy program known as OpRegen®, for the treatment of ocular disorders, including geographic atrophy (GA) secondary to age-related macular degeneration (AMD). Roche has paid Lineage a $50.0 million upfront payment under this alliance and Lineage is eligible to receive up to an additional $620.0 million in certain developmental, regulatory, and commercialization milestone payments. Lineage also is eligible for tiered double-digit percentage royalties on net sales of OpRegen in the U.S and other major markets.

As of the date of this filing, we have five allogeneic, or "off-the-shelf," cell therapy programs in development, of which three have reached clinical testing:

- *OpRegen*®, a retinal pigment epithelial ("RPE") cell replacement therapy currently in a Phase 1/2a multicenter clinical trial for the treatment of geographic atrophy (GA) secondary to age-related macular degeneration (AMD). There are currently no U.S. Food and Drug Administration ("FDA") or European Medicines Agency approved treatment options available for patients with GA. Enrollment in the trial was completed in 2020. In December 2021, this program was partnered with Roche for further clinical development and commercialization.

- *OPC1*, an oligodendrocyte progenitor cell therapy currently in long-term follow-up for a Phase 1/2a multicenter clinical trial for spinal cord injuries ("SCI"). This clinical trial has been partially funded by $14.3 million dollars received under a grant by the California Institute for Regenerative Medicine ("CIRM").

- *VAC*, an allogeneic cancer immunotherapy of antigen-presenting dendritic cells. One of the VAC product candidates, VAC2, is currently in a Phase 1 clinical trial in non-small cell lung cancer ("NSCLC"). This clinical trial is being funded and conducted by Cancer Research UK, one of the world's largest independent cancer research charities. We also have another VAC-based product candidate in preclinical development with our partner, Immunomic Therapeutics, Inc. ("ITI"), for the treatment of glioblastoma multiforme ("GBM").

- *ANP1*, an auditory neuron progenitor cell therapy currently in preclinical development for the treatment of debilitating hearing loss ("DHL").

- *PNC1*, a photoreceptor neural cell transplant therapy currently in preclinical development for the treatment of vision loss due to photoreceptor dysfunction or damage.

We have additional, undisclosed product candidates in various stages of early development, ranging from conceptual to active preclinical development, which cover a range of therapeutic areas and unmet medical needs. Generally, these product candidates are based on the same pluripotent platform technology and employ a similar guided cell differentiation and transplant approach as the four products detailed above.

In addition to seeking to create value for shareholders by developing product candidates and other technologies through our clinical development programs, we also may seek to create value from our large patent estate and related technologies through partnering and/or strategic transactions. We founded two companies based on Lineage intellectual property that later became publicly traded companies: OncoCyte Corporation ("OncoCyte") and AgeX Therapeutics, Inc. ("AgeX"). We continue to hold common stock in OncoCyte as of March 31, 2022.

**Critical Accounting Estimates**

An accounting policy is deemed critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, if different estimates reasonably could have been used, or if changes in the estimate that are reasonably likely to occur could materially impact the financial statements. See Part II, Item 7 – Critical Accounting Estimates and our consolidated financial statements and related notes in Part II, Item 8 of our 2021 10-K for accounting policies and related estimates we believe are the most critical to understanding our condensed consolidated financial statements, financial condition and results of operations and which require complex management judgment and assumptions or involve uncertainties. There have not been any changes to our significant accounting policies or their application since we filed our 2021 10-K.

**Results of Operations**

***Comparison of Three Months Ended March 31, 2022 and 2021***

*Revenues and Cost of Sales*

The amounts in the tables below show our consolidated revenues, by source, and cost of sales for the periods presented (in thousands).

| | Three Months Ended March 31, (unaudited) | | $ Increase/ (Decrease) | % Increase/ (Decrease) |
|---|---|---|---|---|
| | 2022 | 2021 | | |
| Collaboration revenues | $ 4,865 | $ - | $ 4,865 | 100% |
| Royalties | 372 | 293 | 79 | 27% |
| Grant revenues | - | 98 | (98) | (100)% |
| Total revenues | 5,237 | 391 | 4,846 | 1,239% |
| Cost of sales | (176) | (112) | (64) | 57% |
| Gross profit | $ 5,061 | $ 279 | $ 4,782 | 1,714% |

The $4.8 million increase in total revenues was due to a $4.9 million increase in collaboration revenues related to the current period recognition of the $50.0 million upfront licensing payment from Roche, which was included in deferred revenues at December 31, 2021 (see Note 3 for further discussion), and a $0.1 million increase in royalties, offset by a $0.1 million decrease in grant revenues due to no grant-related activities incurred during the current year period.

*Operating expenses*

Our operating expenses consist of research and development expenses and general and administrative expenses.

Research and development expenses. These expenses consist of costs incurred for company-sponsored, collaborative and contracted research and development activities. These costs include direct and research-related overhead expenses including compensation and related benefits, stock-based compensation, consulting fees, research and laboratory fees, rent of research facilities, amortization of intangible assets, and license fees paid to third parties to acquire patents or licenses to use patents and other technology. Research and development expenses that have an alternative future use will be capitalized as tangible assets, and costs with no future benefit or alternative use will be expensed as incurred. Research and development expenses incurred and reimbursed by grants from third parties approximate the grant income recognized in our consolidated statements of operations. Royalties and sublicensing fees are recorded as research and development expenses, unless they are associated with royalties from product sales, which we classify as cost of sales in our consolidated statements of operations.

General and administrative expenses. These expenses include employee and director compensation and related benefits, stock-based compensation, 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, costs of patent applications, prosecution and maintenance, stock exchange-related costs, depreciation expense, marketing costs, legal and accounting costs, and other miscellaneous expenses allocated to general and administrative expense.

The amounts in the tables below are our consolidated operating expenses for the periods presented (in thousands).

| | Three Months Ended March 31 (unaudited) | | $ Increase/ (Decrease) | % Increase/ (Decrease) |
|---|---|---|---|---|
| | 2022 | 2021 | | |
| Research and development expenses | $ 2,988 | $ 3,394 | $ (406) | (12)% |
| General and administrative expenses | 8,469 | 3,935 | 4,534 | 115% |

The following table shows the amount of our total research and development expenses by program for the periods presented (in thousands).

| | Three Months Ended March 31, (unaudited) | | | |
|---|---|---|---|---|
| | Amount | | Percent of Total | |
| **Program** | **2022** | **2021** | **2022** | **2021** |
| OpRegen® and other ophthalmic applications | $ 1,277 | $ 1,102 | 42% | 33% |
| OPC1 | 920 | 1,666 | 31% | 49% |
| VAC platform | 733 | 584 | 25% | 17% |
| ANP1 | 56 | - | 2% | -% |
| All other programs | 2 | 42 | -% | 1% |
| Total research and development expenses | $ 2,988 | $ 3,394 | 100% | 100% |

Research and development expenses. The $0.4 million decrease in total research and development expenses is mainly attributable to: (i) a $0.2 million increase in expenses related to our OpRegen program, attributable primarily to development activities related to the Roche License Agreement; (ii) a $0.7 million net decrease in expenses related to our OPC1 program, primarily related to a decrease in licensing fees, manufacturing, and development activities for the program; (iii) a $0.1 million increase in expenses related to our VAC program, primarily related to manufacturing improvement activities; and (iv) a $0.1 million increase in expenses related to our ANP1 program, primarily related to manufacturing activities for the new auditory neuron cell therapy program.

General and administrative expenses. The $4.5 million increase in general and administrative expenses was primarily attributable to a non-recurring legal settlement of $3.5 million as described in Note 15, a $0.5 million increase in stock-based compensation related expenses (see Note 11 for further discussion on stock-based compensation), a $0.3 million increase in employee salaries and benefits, and a $0.3 million increase in expenses for audit and tax services. These increases were partially offset by a $0.1 million decrease in investor relations expenses.

*Other income and (expenses), net*

The following table shows the amount of other income and (expense), net, for the periods presented (in thousands):

| | Three Months Ended March 31, (unaudited) | |
|---|---|---|
| | **2022** | **2021** |
| **Other income (expenses), net** | | |
| Interest income, net | $ 1 | $ 2 |
| Gain on sale of marketable equity securities | - | 6,024 |
| Unrealized (loss) gain on marketable equity securities | (735) | 1,239 |
| Unrealized gain on warrant liability | 221 | 18 |
| Other expenses, net | (184) | (1,681) |
| Total other income (expenses), net | $ (697) | $ 5,602 |

Marketable equity securities. See Note 4 (Marketable Equity Securities) to the condensed consolidated interim financial statements included in this Report for information regarding our marketable equity securities.

We expect our total other income (expenses), net, to fluctuate each reporting period based on the changes in the market price of OncoCyte common stock, which could significantly impact our net income or loss reported in our condensed consolidated statements of operations for a particular reporting period.

We also account for the shares we hold in Hadasit Bio-Holdings as marketable equity securities. These shares are carried at fair market value on our consolidated balance sheets. The accounting transactions for these shares were not material for either of the three months ended March 31, 2022 and 2021.

Other income and (expenses), net. Other expenses, net, for each of the three months ended March 31, 2022 and 2021 consisted primarily of net foreign currency transaction gains and losses recognized by our subsidiaries Cell Cure and ES Cell International Pte. Ltd., changes in the fair value of warrants issued by Cell Cure, and interest income, net. Foreign currency transaction gains and losses for the periods presented are principally related to the remeasurement of the U.S. dollar denominated notes payable (net) by Cell Cure to Lineage.

*Income Taxes*

The market value of the shares of OncoCyte common stock we hold creates a deferred tax liability based on the closing price of OncoCyte common stock, less our tax basis in the shares. The deferred tax liability ("DTL") generated by the OncoCyte shares we hold as of March 31, 2022, is a source of future taxable income to us, as prescribed by ASC 740-10-30-17, that will more likely than not result in the realization of our deferred tax assets to the extent of the deferred tax liability. This DTL is determined based on the closing price of the OncoCyte common stock as of March 31, 2022. Due to the inherent unpredictability of future price of OncoCyte common stock, we cannot reliably estimate or project those deferred tax liabilities on an annual basis. Therefore, the DTL pertaining to the OncoCyte shares we own, determined based on the actual closing price on the last stock market trading day of the applicable accounting period, and the related impacts to the valuation allowance and deferred tax asset changes, are recorded in the accounting period in which they occur.

We concluded that an ownership change of Asterias occurred when we acquired Asterias, and the net operating loss carryforwards we acquired in connection with the acquisition are subject to limitation under Section 382 of the Internal Revenue Service Code. We will be able to utilize only $52.8 million and $41.9 million of Asterias' federal and California net operating losses, respectively.

A valuation allowance is provided when it is more likely than not that some portion of the deferred tax assets will not be realized. We established a full valuation allowance as of December 31, 2018 due to the uncertainty of realizing future tax benefits from the net operating loss carryforwards and other deferred tax assets, including foreign net operating losses generated by its subsidiaries.

We did not record a deferred tax benefit for either of the three months ended March 31, 2022 and 2021.

We expect that deferred income tax expense or benefit we record each reporting period, if any, will vary depending on the change in the closing price of OncoCyte common stock from period to period and the related changes in the DTLs and our deferred tax assets and other credits, including changes in the valuation allowance, for each period.

**Liquidity and Capital Resources**

***Liquidity***

At March 31, 2022, we had $79.9 million of cash, cash equivalents and marketable equity securities.

***Capital Resources***

Since inception we have incurred significant operating losses and have funded our operations primarily through the issuance of equity securities, the sale of common stock of our former subsidiaries, OncoCyte and AgeX, receipt of proceeds from research grants, revenues from collaborations, royalties from product sales, and sales of research products and services.

Our projected cash flows are subject to various risks and uncertainties, including those described and referenced under Part II, Item 1A, "Risk Factors" of this Report. See the discussion below under the "Cash Flows" for additional information regarding our sources of cash during the reporting period.

As of March 31, 2022, $63.8 million remained available for sale under our at the market offering program. See Note 10 (Shareholders' Equity) to the condensed consolidated interim financial statements included in this Report for additional information.

We may use our marketable equity securities for liquidity as necessary and as market conditions allow. The market value of our marketable equity securities may not represent the amount that could be realized in a sale of such securities due to various market and regulatory factors, including trading volume, prevailing market conditions and prices at the time of any sale and subsequent sales of securities by the entities. In addition, the value of our marketable equity securities may be significantly and adversely impacted by deteriorating global economic conditions and the recent disruptions to and volatility in the credit and financial markets in the United States and worldwide resulting from the ongoing COVID-19 pandemic and the conflict in Ukraine.

***Additional Capital Requirements***

Our financial obligations primarily consist of vendor contracts to provide research services and other purchase commitments with suppliers. In the normal course of business, we enter into services agreements with contract research organizations, contract manufacturing organizations and other third parties. Generally, these agreements provide for termination upon notice, with specified amounts due upon termination based on the timing of termination and the terms of the agreement. The amounts and timing of payments under these agreements are uncertain and contingent upon the initiation and completion of the services to be provided.

Our commitments also include obligations to our licensors under our in-license agreements, which may include sublicense fees, milestones fees, royalties and reimbursement of patent maintenance costs. Sublicense fees are payable to licensors when we sublicense underlying intellectual property to third parties; the fees are based on a percentage of the license fees we receive from sublicensees. Milestone fees are payable to licensors upon our future achievement of certain development and regulatory milestones. Royalties are payable to licensors based on a percentage of net sales of licensed products. Patent maintenance costs are payable to licensors as reimbursement for the cost of maintaining of license patents. Due to the contingent nature of the payments, the amounts and timing of payments to licensors under our in-license agreements are uncertain and may fluctuate significantly from period to period.

***Cash Flows***

*Cash flows provided by (used in) operating activities*

Net cash provided by operating activities was $21.9 million for the three months ended March 31, 2022, which primarily reflects the loss from operations of $6.4 million plus the changes in assets and liabilities of $27.1 million. The change in assets and liabilities was impacted by the collection of the Roche upfront payment, and subsequent related payments to the IIA and Hadasit (see Note 14 (Commitments and Contingencies) to the condensed consolidated interim financial statements included in this Report for further explanation), partially offset by the accrual of the litigation settlement as described in Note 15.

Net cash used in operating activities of $7.4 million for the three months ended March 31, 2021 primarily reflects the loss from operations of $7.1 million plus the changes in assets and liabilities of $1.3 million. These items were offset primarily by non-cash expenses of $0.5 million for stock-based compensation and $0.3 million of depreciation and amortization. The unrealized gain on marketable equity securities had no effect on cash flows.

*Cash flows used (provided) by investing activities*

Cash used by investing activities for the three months ended March 31, 2022 was $0.1 million and related to the purchase of equipment.

Cash provided by investing activities for the three months ended March 31, 2021 was $10.1 million and primarily reflects proceeds from sales of a portion of our shares of OncoCyte common stock during the period.

*Cash flows provided by financing activities*

Cash provided by financing activities for the three months ended March 31, 2022 was $0.5 million and consists of $0.4 million of proceeds we received from the exercise of employee stock options and $0.1 million of net proceeds we received from the sale of common shares under our at the market offering program.

Cash provided by financing activities for the three months ended March 31, 2021 was $21.0 million and consists of $19.3 million of net proceeds we received from the sale of common shares under our at the market offering program and $1.7 million of proceeds we received from the exercise of employee stock options.

***Future Funding Requirements***

At March 31, 2022, we had an accumulated deficit of approximately $344.2 million. We expect to continue to incur losses for at least the next several years. We expect that our operating expenses will continue to increase for the foreseeable future as we continue the development of, and seek regulatory approval for, our product candidates. As a result, we will need significant additional capital to fund our operations. Our determination as to when we will seek additional capital and the amount of additional capital that we will need will be based on our evaluation of the progress we make in our research and development programs, changes to the scope and focus of those programs, changes in grant funding for certain of those programs, and projection of future costs, revenues, and rates of expenditure. If we are unable to raise additional capital when and as needed, we may be required to delay, postpone, or cancel our clinical trials or limit the number of clinical trial sites.

We may seek to obtain the additional capital we may need through one or more equity offerings, debt financings or other third-party funding, including potential strategic alliances and licensing or collaboration arrangements. We cannot assure that adequate additional capital will be available on favorable terms, if at all. The issuance of additional securities, whether equity or debt, or the possibility of such issuance, may cause the market price of our common shares to decline, and the issuance of additional equity securities could result in the dilution of the interests of our current shareholders. If we obtain additional capital through strategic alliances and licensing or collaboration arrangements, we may be required to relinquish rights to our intellectual property, our product candidates or otherwise agree to terms unfavorable to us. The unavailability or inadequacy of additional capital to meet future capital needs could force us to modify, curtail, delay, or suspend some or all aspects of our current planned operations. Our ability to raise additional capital may be adversely impacted by deteriorating global economic conditions and the disruptions to and volatility in the credit and financial markets in the United States and worldwide resulting from the ongoing COVID-19 pandemic and the conflict in Ukraine.

We evaluated our projected cash flows, and we believe that our $79.9 million in cash, cash equivalents and marketable equity securities at March 31, 2022, provide sufficient liquidity to carry out our current planned operations (including our financial obligation under the legal settlement discussed in Note 15), through at least twelve months from the issuance date of our consolidated financial statements included elsewhere in this Report. We believe we will meet the longer-term expected future cash requirements and obligations, through our current cash and cash equivalents, milestone and other payments under our collaborative agreements, and our available capacity on our at the market offering program. See Note 10 (Shareholders' Equity) to the condensed consolidated interim financial statements included in this Report for additional information. Under the terms of the operating leases for the facilities from which Cell Cure operates, a total of $2.3 million of rent payments will become due, of which $0.4 million will become due in 2022. See Note 14 (Commitments and Contingencies) to the condensed consolidated interim financial statements included in this Report for additional information regarding our contractual obligations.

**Item 3. Quantitative and Qualitative Disclosures about Market Risk**

Under SEC rules and regulations, as a smaller reporting company, we are not required to provide the information required by this item.

**Item 4. 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 Chief Executive Officer and our Chief Financial Officer, reviewed and evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Report. 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 period covered by this Report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## PART II - OTHER INFORMATION

### Item 1. Legal Proceedings

The information required by this Item is incorporated herein by reference to the disclosure under the heading “Litigation” in Note 14 (Commitments and Contingencies) to the condensed consolidated interim financial statements included in this Report in Part I, Item 1 of this Report.

From time-to-time we may be involved in a variety of claims or litigation proceedings. Such proceedings may initially be viewed as immaterial but could later prove to be material. Litigation proceedings are inherently unpredictable and excessive verdicts do occur. Given the inherent uncertainties in litigation, even when we can reasonably estimate the amount of possible loss or range of loss and reasonably estimable loss contingencies, the actual outcome may change in the future due to new developments or changes in approach. In addition, such claims or litigation proceedings could involve significant expense and diversion of management’s attention and resources from other matters.

### Item 1A. Risk Factors

An investment in our common shares involves a high degree of risk. You should carefully consider the risks and uncertainties described in our Annual Report on Form 10-K for the year ended December 31, 2021 (the “2021 10-K”), as filed with the Securities and Exchange Commission on March 10, 2022, in addition to other information in this Report, before investing in our common shares. The occurrence of any of these risks could have a material adverse effect on our business, financial condition, results of operations and growth prospects. In these circumstances, the market price of our common shares could decline, and you may lose all or part of your investment. Except as described below, there have been no material changes from the risk factors disclosed in Part I, Item 1A. Risk Factors in our 2021 10-K.

***Geopolitical risks associated with the ongoing military conflict between Russia and Ukraine could have an adverse impact on our business, financial condition and results of operations, including our clinical trials.***

Our results of operations are affected by economic conditions, including macroeconomic conditions and levels of business confidence. The war in Ukraine and the uncertain nature, magnitude, and duration of the conflict and the potential effect of sanctions and other measures being imposed in response thereto have contributed to increased levels of economic and political uncertainty, which could have an adverse impact on macroeconomic factors that affect the financial markets, the global economy and our business and operations. Additionally, the ongoing conflict in Ukraine may disrupt the ability of third parties on which we rely to perform in accordance with our expectations, including on commercial research organizations to conduct clinical trials. Moreover, enrollment and retention of clinical trial participants may be adversely affected. We cannot be certain what the overall impact of this conflict will be on our ability to conduct and complete our clinical trials on schedule. However, interruptions of our clinical trials could significantly delay our clinical development plans and potential authorization or approval of our product candidates, which could increase our costs and jeopardize our ability to successfully commercialize our product candidates.

### Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Not applicable.

### Item 3. Default Upon Senior Securities

None.

### Item 4. Mine Safety Disclosures

Not applicable.

### Item 5. Other Information

On May 9, 2022, the Company entered into indemnification agreements, in the form adopted and approved by the Company’s board of directors, with each of its directors and executive officers. The indemnification agreements generally require the Company to, among other things, indemnify the directors and executive officers under the circumstances and to the extent provided for therein, including against expenses and liabilities in connection with any proceeding other than those instituted by or in the right of the Company, as well as against expenses and, to the fullest extent permitted by law, amounts paid in settlement in connection with any proceeding instituted by or in the right of the Company. The preceding description of the indemnification agreements is qualified in its entirety by reference to the copy of the form of indemnification agreement, which the Company expects to file as an exhibit to its quarterly report on Form 10-Q for the quarter ended June 30, 2022.

**Item 6. Exhibits**

| Exhibit Number | Description | Incorporation by Reference | | | |
|---|---|---|---|---|---|
| | | Exhibit Number | Filing | Filing Date | File No. |
| 3.1 | Restated Articles of Incorporation, as amended | 3.1 | 10-Q | May 10, 2018 | 001-12830 |
| 3.2 | Certificate of Ownership | 3.1 | 8-K | August 12, 2019 | 001-12830 |
| 3.3 | Amended and Restated Bylaws | 3.2 | 8-K | August 12, 2019 | 001-12830 |
| 31.1* | Certification of Chief Executive Officer and Chief Financial Officer pursuant to Form of Rule 13a-14(a), as Adopted Pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002 | | | | |
| 32.1# | Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 | | | | |
| 101* | Interactive Data File | | | | |
| 101.INS* | Inline XBRL Instance Document | | | | |
| 101.SCH* | Inline XBRL Taxonomy Extension Schema | | | | |
| 101.CAL* | Inline XBRL Taxonomy Extension Calculation Linkbase | | | | |
| 101.DEF* | Inline XBRL Taxonomy Extension Definition Document | | | | |
| 101.LAB* | Inline XBRL Taxonomy Extension Label Linkbase | | | | |
| 101.PRE* | Inline XBRL Taxonomy Extension Presentation Linkbase | | | | |
| 104* | Cover Page Interactive Data File (embedded within the Inline XBRL document) | | | | |

* Filed herewith
# Furnished herewith

**SIGNATURES**

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

LINEAGE CELL THERAPEUTICS, INC.

Date: May 12, 2022

*/s/ Brian M. Culley*

Brian M. Culley
Chief Executive Officer

Date: May 12, 2022

*/s/ Kevin Leon Cook*

Kevin Leon Cook
Chief Financial Officer

**Exhibit 31.1**

**CERTIFICATIONS**

I, Brian M. Culley, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Lineage Cell 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 Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter 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 the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 12, 2022

*/s/ Brian M. Culley*

Brian M. Culley
Chief Executive Officer
(Principal Executive Officer)

**Exhibit 31.2**

**CERTIFICATIONS**

I, Kevin Leon Cook, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Lineage Cell 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 Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter 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 my most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 12, 2022

*/s/ Kevin Leon Cook*
Kevin Leon Cook
Chief Financial Officer
(Principal Financial Officer)

**Exhibit 32.1**

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,**
**AS ADOPTED PURSUANT TO**
**SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of Lineage Cell Therapeutics, Inc. (the "Company") for the quarter ended March 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Brian M. Culley, Chief Executive Officer, and I, Kevin Leon Cook, 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: May 12, 2022

*/s/ Brian M. Culley*
Brian M. Culley
Chief Executive Officer
(Principal Executive Officer)

*/s/ Kevin Leon Cook*
Kevin Leon Cook
Chief Financial Officer
(Principal Financial Officer)