

**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, 2019

OR

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

For the transition period from _____ to _____

Commission file number **1-12830**

BioTime, Inc.

(Exact name of registrant as specified in its charter)

California

(State or other jurisdiction of incorporation or organization)

94-3127919

(IRS Employer Identification No.)

1010 Atlantic Avenue, Suite 102

Alameda, California

(Address of principal executive offices)

94501

(Zip code)

(510) 521-3390

(Registrant's telephone number, including area code)

Title of each class

Common Stock

Trading Symbol

BTX

Name of exchange on which registered

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

Non-accelerated filer

Emerging growth company

Accelerated filer

Smaller reporting company

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

Indicate by check mark whether the registrant 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, 2019 was 149,642,861.

PART 1—FINANCIAL INFORMATION

This Report on Form 10-Q (“Report”) contains forward-looking statements 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 about:

- 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 and timing to advance our product candidates into, and to successfully initiate, conduct, enroll and complete, clinical trials;
- 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;
- our ability to successfully integrate the operations of Asterias into BioTime; and
- other risks and uncertainties, including those described under Part I, Item 1A. Risk Factors of this Report.

Any forward-looking statements in this Report 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 these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under Part I, Item 1A. Risk Factors of our Annual Report on Form 10-K as filed with the Securities Exchange Commission on March 14, 2019. 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.

References to “BioTime”, “we” and “our” means BioTime, Inc. and its subsidiaries and affiliates unless the context otherwise indicates.

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

Recent Transactions Affecting Our Corporate Organization

Asterias Merger

On March 8, 2019, we acquired the remaining ownership interests in Asterias Biotherapeutics, Inc. (“Asterias”) via merger. In the acquisition, the outstanding shares of Asterias common stock held by shareholders other than BioTime were converted into shares of our common stock at an exchange ratio of 0.71 BioTime shares for each Asterias share.

Prior to May 13, 2016, Asterias was a majority-owned and consolidated subsidiary of BioTime. On May 13, 2016, BioTime’s percentage ownership decreased from 57.1% to 48.7% as a result of the sale of shares of common stock by Asterias in a public offering, resulting in BioTime’s loss of control of Asterias under generally accepted accounting principles in the U.S. (“GAAP”). Accordingly, BioTime deconsolidated Asterias effective May 13, 2016. From May 13, 2016 until the consummation of the merger on March 8, 2019, BioTime accounted for its ownership in Asterias under the equity method of accounting, electing the fair value option, with the investment carried on the consolidated balance sheet at fair value and all subsequent changes in fair value included in BioTime’s consolidated statements of operations in other income and expenses, net. The deconsolidation of Asterias is sometimes referred to as the “Asterias Deconsolidation” in this Report.

AgeX Deconsolidation and Distribution

On August 30, 2018, we entered into a Stock Purchase Agreement with Juvenescence Limited (“Juvenescence”) and AgeX Therapeutics, Inc. (“AgeX”), under which we sold 14,400,000 of our shares of AgeX common stock to Juvenescence for \$3.00 per share. The transaction resulted in over \$43 million in non-dilutive financing for BioTime.

Upon completion of that transaction, our percentage ownership of AgeX’s outstanding shares of common stock decreased from 80.4% to 40.2%, and Juvenescence’s percentage ownership increased from 5.6% to 45.8%. As a result of the transaction, as of August 30, 2018, AgeX was no longer our subsidiary and effective that date, due to the decrease in our percentage ownership in AgeX to below 50%, we deconsolidated AgeX’s consolidated financial statements and consolidated results of operations from ours under GAAP. Prior to that date, AgeX was our majority-owned and consolidated subsidiary. Beginning on August 30, 2018 through November 28, 2018 (the date on which AgeX began trading as a public company as discussed below), we accounted for AgeX using the equity method of accounting, electing the fair value option, recording the retained interest in AgeX at fair value on August 30, 2018 with all subsequent changes in fair value included in our consolidated statements of operations in other income and expenses, net. The deconsolidation of AgeX is sometimes referred to as the “AgeX Deconsolidation” in this Report.

On November 28, 2018, AgeX began trading as a public company on the NYSE American (under the symbol “AGE”) and, on that date, we distributed 12.7 million shares of AgeX common stock we owned to our shareholders, on a pro rata basis, in the ratio of one share of AgeX common stock for every 10 shares of our common stock they owned. This distribution was accounted for at fair value as a taxable, dividend-in-kind transaction in the aggregate amount of \$34.4 million. Immediately following the distribution, we owned 1.7 million shares of AgeX common stock, all of which we still own, and which represents approximately 4.6% of AgeX’s outstanding common stock as of March 31, 2019. We hold the shares of AgeX common stock that we own as marketable equity securities. The distribution of AgeX common stock is sometimes referred to as the “AgeX Distribution” in this Report.

As of, and for each reporting period after August 30, 2018, the fair value of our ownership interest in AgeX will be determined by multiplying the fair value of a share of AgeX common stock by the number of such shares we own.

AgeX’s consolidated assets and liabilities are not included in BioTime’s unaudited condensed consolidated balance sheet at March 31, 2019 and December 31, 2018, due to the deconsolidation of AgeX on August 30, 2018.

BioTime’s unaudited consolidated statements of operations for the three months ended March 31, 2019 do not include AgeX’s consolidated results. For the three months ended March 31, 2018, BioTime’s unaudited consolidated results include AgeX’s consolidated results.

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

Item 1. Financial Statements

BIOTIME, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(IN THOUSANDS)

	March 31, 2019 (Unaudited) (Notes 2 and 3)	December 31, 2018
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	\$ 18,011	\$ 23,587
Marketable equity securities	9,085	7,154
Trade accounts and grants receivable, net	1,402	767
Receivables from affiliates, net (Note 10)	-	2,112
Landlord receivable	-	840
Prepaid expenses and other current assets	2,158	1,898
Total current assets	30,656	36,358
NONCURRENT ASSETS		
Property and equipment, net	8,918	5,835
Deposits and other long-term assets	890	505
Promissory note from Juvenescence (Note 5)	22,482	22,104
Equity method investment in OncoCyte, at fair value (Note 4)	57,963	20,250
Equity method investment in Asterias, at fair value	-	13,483
Goodwill	12,977	-
Intangible assets, net	49,829	3,125
TOTAL ASSETS	\$ 183,715	\$ 101,660
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable and accrued liabilities	\$ 7,336	\$ 6,463
Financing lease and right of use lease liabilities, current portion	954	237
Promissory notes, current portion	18	70
Deferred grant revenue	43	42
Liability classified warrants, current portion	372	-
Total current liabilities	8,723	6,812
LONG-TERM LIABILITIES		
Deferred tax liability	8,581	-
Deferred revenues, net of current portion	200	-
Deferred rent liabilities, net of current portion	-	244
Right-of-use lease liability, net of current portion	4,016	1,854
Financing lease, net of current portion	103	104
Liability classified warrants, net of current portion, and other long-term liabilities	856	400
TOTAL LIABILITIES	22,479	9,414
Commitments and contingencies (Note 15)		
SHAREHOLDERS' EQUITY		
Preferred shares, no par value, authorized 2,000 shares; none issued and outstanding as of March 31, 2019 and December 31, 2018	-	-
Common shares, no par value, 250,000 shares authorized; 149,388 shares issued and outstanding as of March 31, 2019 and 127,136 shares issued and outstanding as of December 31, 2018	384,553	354,270
Accumulated other comprehensive income	694	1,426
Accumulated deficit	(222,403)	(261,856)
BioTime, Inc. shareholders' equity	162,844	93,840
Noncontrolling interest (deficit)	(1,608)	(1,594)
Total shareholders' equity	161,236	92,246
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$ 183,715	\$ 101,660

See accompanying notes to the condensed consolidated interim financial statements.

BIOTIME, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(IN THOUSANDS, EXCEPT PER SHARE DATA)
(UNAUDITED)

	Three Months Ended	
	March 31,	
	2019	2018
REVENUES:		
Grant revenue	\$ 749	\$ 326
Royalties from product sales and license fees	86	136
Subscription and advertisement revenues	-	239
Sale of research products and services	93	-
Total revenues	<u>928</u>	<u>701</u>
Cost of sales	<u>(68)</u>	<u>(109)</u>
Gross profit	860	592
OPERATING EXPENSES:		
Research and development	4,961	5,935
Acquired in-process research and development	-	800
General and administrative	8,660	6,044
Total operating expenses	<u>13,621</u>	<u>12,779</u>
Loss from operations	<u>(12,761)</u>	<u>(12,187)</u>
OTHER INCOME/(EXPENSES):		
Interest income, net	442	52
Gain on sale of equity method investment in Ascendance	-	3,215
Gain (loss) on equity method investment in OncoCyte at fair value	37,713	(37,419)
Gain (loss) on equity method investment in Asterias at fair value	6,744	(17,398)
Unrealized gain on marketable equity securities	1,931	215
Unrealized gain on warrant liability	37	-
Other income (expense), net	<u>806</u>	<u>(176)</u>
Total other income (expense), net	<u>47,673</u>	<u>(51,511)</u>
INCOME/(LOSS) BEFORE INCOME TAXES	<u>34,912</u>	<u>(63,698)</u>
Deferred income tax benefit (Note 13)	<u>4,384</u>	<u>-</u>
NET INCOME/(LOSS)	<u>39,296</u>	<u>(63,698)</u>
Net loss attributable to noncontrolling interest	<u>14</u>	<u>150</u>
NET INCOME/(LOSS) ATTRIBUTABLE TO BIOTIME, INC.	<u>\$ 39,310</u>	<u>\$ (63,548)</u>
NET INCOME/(LOSS) PER COMMON SHARE:		
BASIC	<u>\$ 0.30</u>	<u>\$ (0.50)</u>
DILUTED	<u>\$ 0.30</u>	<u>\$ (0.50)</u>
WEIGHTED AVERAGE NUMBER OF SHARES OF COMMON STOCK OUTSTANDING:		
BASIC	<u>132,865</u>	<u>126,869</u>
DILUTED	<u>132,869</u>	<u>126,869</u>

See accompanying notes to the condensed consolidated interim financial statements.

BIOTIME, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME/(LOSS)
(IN THOUSANDS)
(UNAUDITED)

	Three Months Ended	
	March 31,	
	2019	2018
NET INCOME/(LOSS)	\$ 39,296	\$ (63,698)
Other comprehensive income (loss), net of tax:		
Foreign currency translation adjustment, net of tax	(732)	75
Available-for-sale investments:		
Reclassification of beginning accumulated other comprehensive income to accumulated deficit	-	(328)
COMPREHENSIVE INCOME/(LOSS)	38,564	(63,951)
Less: Comprehensive loss attributable to noncontrolling interest	14	150
COMPREHENSIVE INCOME/(LOSS) ATTRIBUTABLE TO BIOTIME, INC. COMMON SHAREHOLDERS	\$ 38,578	\$ (63,801)

See accompanying notes to the condensed consolidated interim financial statements.

BIOTIME, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(IN THOUSANDS)
(UNAUDITED)

	Three Months Ended	
	March 31,	
	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income/(loss) attributable to BioTime, Inc.	\$ 39,310	\$ (63,548)
Net loss allocable to noncontrolling interest	(14)	(150)
Adjustments to reconcile net income (loss) attributable to BioTime, Inc. to net cash used in operating activities:		
Gain on sale of equity method investment in Ascendance	-	(3,215)
Acquired in-process research and development	-	800
Unrealized (gain) loss on equity method investment in OncoCyte at fair value	(37,713)	37,419
Unrealized (gain) loss on equity method investment in Asterias at fair value	(6,744)	17,398
Unrealized gain on marketable equity securities	(1,931)	(215)
Deferred income tax benefit	(4,384)	-
Depreciation expense, including amortization of leasehold improvements	269	281
Amortization of right-of-use asset	14	-
Amortization of intangible assets	485	582
Stock-based compensation	1,440	984
Change in fair value of liability classified warrants	(37)	108
Foreign currency remeasurement and other (gain) loss	(839)	87
Changes in operating assets and liabilities:		
Accounts and grants receivable, net	(614)	(37)
Receivables from affiliates, net of payables	2,129	175
Prepaid expenses and other current assets	(66)	(213)
Accounts payable and accrued liabilities	(241)	(840)
Deferred revenue and other liabilities	(378)	46
Net cash used in operating activities	<u>(9,314)</u>	<u>(10,338)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Proceeds from the sale of equity method investment in Ascendance	-	3,215
Purchase of in-process research and development	-	(800)
Cash and cash equivalents acquired in the Asterias Merger	3,117	-
Purchase of equipment and other assets	(169)	(198)
Security deposit paid and other	(2)	(6)
Net cash provided by investing activities	<u>2,946</u>	<u>2,211</u>
CASH FLOWS FROM FINANCING ACTIVITIES:		
Common shares received and retired for employee taxes paid	(74)	(7)
Reimbursement from landlord on tenant improvements	738	-
Repayment of principal portion of promissory notes	(52)	-
Proceeds from sale of subsidiary warrants	-	737
Repayment of financing lease liabilities	(6)	(97)
Net cash provided by financing activities	<u>606</u>	<u>633</u>
Effect of exchange rate changes on cash, cash equivalents and restricted cash	<u>53</u>	<u>60</u>
NET DECREASE IN CASH, CASH EQUIVALENTS AND RESTRICTED CASH	(5,709)	(7,434)
CASH, CASH EQUIVALENTS AND RESTRICTED CASH:		
At beginning of the period	24,399	37,685
At end of the period	<u>\$ 18,690</u>	<u>\$ 30,251</u>

See accompanying notes to the condensed consolidated interim financial statements.

BIOTIME, INC. AND SUBSIDIARIES
NOTES TO THE CONDENSED CONSOLIDATED INTERIM FINANCIAL STATEMENTS
(UNAUDITED)

1. Organization and Business Overview

BioTime is a clinical-stage biotechnology company developing new cellular therapies for degenerative retinal diseases, neurological conditions associated with demyelination, and aiding the body in detecting and combating cancer. BioTime's programs are based on its proprietary cell-based therapy platform and associated development and manufacturing capabilities. With this platform BioTime develops and manufactures specialized, terminally-differentiated human cells from its pluripotent and progenitor cell starting materials. These differentiated cells are developed either to replace or support cells that are dysfunctional or absent due to degenerative disease or traumatic injury, or administered as a means of helping the body mount an effective immune response to cancer.

BioTime has three cell therapy programs in clinical development:

- *OpRegen*[®], a retinal pigment epithelium cell replacement therapy currently in a Phase I/IIa multicenter clinical trial for the treatment of advanced dry-age-related macular degeneration ("dry-AMD") with geographic atrophy. There currently are no therapies approved by the U.S. Food and Drug Administration ("FDA") for dry-AMD, which accounts for approximately 85-90% of all AMD cases and is the leading cause of blindness in people over the age of 60.
- *OPC1*, an oligodendrocyte progenitor cell therapy currently in a Phase I/IIa multicenter clinical trial for acute spinal cord injuries ("SCI"). This clinical trial has been partially funded by the California Institute for Regenerative Medicine ("CIRM").
- *VAC2*, an allogeneic (non-patient-specific or "off-the-shelf") cancer immunotherapy of antigen-presenting dendritic cells currently in a Phase I clinical trial in non-small cell lung cancer. This clinical trial is being funded and conducted by Cancer Research UK ("CRUK"), the world's largest independent cancer research charity.

BioTime also has cell/drug delivery programs that are based upon its proprietary *HyStem*[®] cell and drug delivery matrix technology. *HyStem*[®] was designed to support the formulation, transfer, retention, and engraftment of cellular therapies.

BioTime is also enabling early-stage programs in other new technologies through its own research programs as well as through other subsidiaries, affiliates or investees.

Asterias Merger

On November 7, 2018, BioTime, Asterias and Patrick Merger Sub, Inc., a wholly owned subsidiary of BioTime ("Merger Sub"), entered into an Agreement and Plan of Merger (the "Merger Agreement") whereby BioTime 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 BioTime and Asterias approved the Merger Agreement. Prior to the consummation of the Merger Agreement, BioTime owned approximately 38% of Asterias' issued and outstanding common stock and accounted for Asterias as an equity method investment.

On March 8, 2019, the Asterias merger closed with Asterias surviving as a wholly-owned subsidiary of BioTime. The former stockholders of Asterias (other than BioTime) received 0.71 shares of BioTime common stock for every share of Asterias common stock they owned. BioTime issued 24,695,898 shares of common stock, 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 BioTime common stock on March 8, 2019, was \$32.4 million. BioTime also assumed warrants to purchase shares of Asterias common stock.

The Asterias Merger has been accounted for using the acquisition method of accounting in accordance with Accounting Standards Codification ("ASC") Topic 805, *Business Combinations*, which requires, among other things, that the assets and liabilities assumed be recognized at their fair values as of the acquisition date.

See Note 3 for a full discussion of the Asterias Merger.

Investment in OncoCyte

BioTime has significant equity holdings in OncoCyte Corporation (“OncoCyte”), a publicly traded company, which BioTime founded and, in the past, was a majority-owned consolidated subsidiary. OncoCyte (NYSE American: OCX) is developing confirmatory diagnostic tests for lung cancer utilizing novel liquid biopsy technology. As of March 31, 2019, BioTime owned 14.7 million shares of OncoCyte common stock, or 28% of its outstanding shares.

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 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, 2018 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 BioTime’s Annual Report on Form 10-K for the year ended December 31, 2018.

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 BioTime’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

BioTime’s condensed consolidated interim financial statements include the accounts of its subsidiaries. The following table reflects BioTime’s ownership, directly or through one or more subsidiaries, of the outstanding shares of its operating subsidiaries as of March 31, 2019.

Subsidiary	Field of Business	BioTime Ownership	Country
Asterias BioTherapeutics, Inc.	Cell therapy clinical development programs in spinal cord injury and oncology	100%	USA
Cell Cure Neurosciences Ltd. (“Cell Cure”)	Products to treat age-related macular degeneration	99% ⁽¹⁾	Israel
ES Cell International Pte. Ltd. (“ESI”)	Stem cell products for research, including clinical grade cell lines produced under cGMP	100%	Singapore
OrthoCyte Corporation (“OrthoCyte”)	Developing bone grafting products for orthopedic diseases and injuries	99.8%	USA

(1) Includes shares owned by BioTime and ESI.

For the three months ended March 31, 2018, BioTime’s unaudited consolidated results include AgeX’s consolidated results for the full period presented. As a result of the AgeX Deconsolidation, beginning on August 30, 2018 (a) AgeX’s consolidated financial statements and consolidated results are no longer a part of BioTime’s condensed consolidated interim financial statements and results, and (b) the fair value of AgeX common stock held by BioTime is now reflected on BioTime’s condensed consolidated balance sheet and the changes in the fair value of those shares during the applicable reporting period are reflected as gains or losses in BioTime’s condensed consolidated statements of operations included in other income and expenses, net.

All material intercompany accounts and transactions have been eliminated in consolidation. As of March 31, 2019, BioTime consolidated its direct and indirect wholly-owned or majority-owned subsidiaries because BioTime 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 BioTime’s consolidated balance sheets.

Liquidity

Since inception, BioTime has incurred significant operating losses and has funded its operations primarily through the issuance of equity securities, sale of common stock of AgeX, a former subsidiary, receipt of research grants, royalties from product sales, license revenues and sales of research products. At March 31, 2019, BioTime had an accumulated deficit of approximately \$222.4 million, working capital of \$21.9 million and shareholders’ equity of \$161.2 million. BioTime has evaluated its projected cash flows and believes that its \$27.1 million of cash, cash equivalents and marketable equity securities at March 31, 2019, plus the value of its equity investment in OncoCyte (\$58.0 million based on the closing price of OncoCyte common stock on March 31, 2019), provide sufficient cash, cash equivalents, and liquidity to carry out BioTime’s current planned operations through at least twelve months from the issuance date of the consolidated financial statements included herein. Although BioTime has no plans to liquidate its investment in OncoCyte, if BioTime needs near term working capital or liquidity to supplement its cash and cash equivalents for its operations, BioTime may sell some, or all, of its OncoCyte shares, as necessary.

The AgeX Distribution was completed on November 28, 2018 when AgeX became a publicly traded company (see Note 6). BioTime continues to hold a minority interest in AgeX that may be a source of additional liquidity to BioTime as a marketable equity security.

If the promissory note issued by Juvenescence in favor of BioTime discussed in Note 5 is converted into shares of Juvenescence common stock prior to its maturity date, the Juvenescence common stock may be a marketable security that BioTime may use to supplement its liquidity, as needed. If such promissory note is not converted, it is payable in cash, plus accrued interest, at maturity on August 30, 2020.

On March 8, 2019, with the consummation of the Asterias Merger, Asterias became BioTime's wholly-owned subsidiary. BioTime began consolidating Asterias' operations and results with its operations and results beginning on March 8, 2019 (see Note 3). As BioTime integrates Asterias' operations into its own, BioTime expects to make extensive reductions in headcount and to reduce non-clinical related spend, in each case, as compared to Asterias' operations before the Asterias Merger.

BioTime's projected cash flows are subject to various risks and uncertainties, and the unavailability or inadequacy of financing to meet future capital needs could force BioTime to modify, curtail, delay, or suspend some or all aspects of its planned operations. BioTime's determination as to when it will seek new financing and the amount of financing that it will need will be based on BioTime's evaluation of the progress it makes in its research and development programs, any changes to the scope and focus of those programs, any changes in grant funding for certain of those programs, and projection of future costs, revenues, and rates of expenditure. BioTime may be required to delay, postpone, or cancel clinical trials or limit the number of clinical trial sites, unless it is able to obtain adequate financing. In addition, BioTime has incurred and expects to continue incurring significant costs in connection with the acquisition of Asterias and with integrating its operations. BioTime may incur additional costs to maintain employee morale and to retain key employees. BioTime cannot assure that adequate financing will be available on favorable terms, if at all. Sales of additional equity securities by BioTime or its subsidiaries and affiliates could result in the dilution of the interests of current shareholders.

Business Combinations

BioTime accounts for business combinations, such as the Asterias Merger completed in March 2019, in accordance with ASC Topic 805, which requires the purchase price to be measured at fair value. When the purchase consideration consists entirely of shares of BioTime's common stock, BioTime calculates the purchase price by determining the fair value, as of the acquisition date, of shares issued in connection with the closing of the acquisition. BioTime recognizes estimated fair values of the tangible assets and intangible assets acquired, including in-process research and development ("IPR&D"), and liabilities assumed as of the acquisition date, and records as goodwill any amount of the fair value of the tangible and intangible assets acquired and liabilities assumed in excess of the purchase price.

Equity method investments at fair value

BioTime uses the equity method of accounting when it has the ability to exercise significant influence, but not control, as determined in accordance with GAAP, over the operating and financial policies of a company. For equity method investments which BioTime has elected to measure at fair value, unrealized gains and losses are reported in the consolidated statements of operations in other income and expenses, net.

As further discussed in Note 4, BioTime has elected to account for its OncoCyte shares at fair value using the equity method of accounting because beginning on February 17, 2017, the respective date on which BioTime deconsolidated OncoCyte, BioTime has not had control of OncoCyte, as defined by GAAP, but continues to exercise significant influence over this company. Under the fair value method, BioTime's value in shares of common stock it holds in OncoCyte is marked to market at each balance sheet date using the closing price of OncoCyte common stock on the NYSE American multiplied by the number of shares of OncoCyte held by BioTime, with changes in the fair value of the OncoCyte shares included in other income and expenses, net, in the consolidated statements of operations. The OncoCyte shares are considered level 1 assets as defined by ASC 820, *Fair Value Measurements and Disclosures*.

Prior to the Asterias Merger completed on March 8, 2019 discussed in Note 3, BioTime accounted for its Asterias shares held at fair value, using the equity method of accounting.

Revenue Recognition

During the first quarter of 2018, BioTime adopted Financial Accounting Standards Board (“FASB”) Accounting Standards Update (“ASU”) ASU 2014-09, *Revenues from Contracts with Customers (Topic 606)*, which created a single, principle-based revenue recognition model that supersedes and replaces nearly all existing U.S. GAAP revenue recognition guidance. BioTime adopted ASU 2014-09 using the modified retrospective transition method applied to those contracts which were not completed as of the adoption date. Results for reporting periods beginning on January 1, 2018 and thereafter are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with BioTime’s historical revenue recognition accounting under Topic 605.

BioTime recognizes revenue in a manner that depicts the transfer of control of a product or a service to a customer and reflects the amount of the consideration it is entitled to receive in exchange for such product or service. In doing so, BioTime 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. BioTime considers the terms of a contract and all relevant facts and circumstances when applying the revenue recognition standard. BioTime applies the revenue recognition standard, including the use of any practical expedients, consistently to contracts with similar characteristics and in similar circumstances.

BioTime’s largest source of revenue is currently related to government grants. In applying the provisions of ASU 2014-09, BioTime 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 good or services to the government entities funding the grant. BioTime has, and will continue to, account for grants received to perform research and development services in accordance with ASC 730-20, *Research and Development Arrangements*, which requires an assessment, at the inception of the grant, of whether the grant is a liability or a contract to perform research and development services for others. If BioTime or a subsidiary receiving the grant is obligated to repay the grant funds to the grantor regardless of the outcome of the research and development activities, then BioTime is required to estimate and recognize that liability. Alternatively, if BioTime or a subsidiary receiving the grant is not required to repay, or if it is required to repay the grant funds only if the research and development activities are successful, then the grant agreement is accounted for as a contract to perform research and development services for others, in which case, grant revenue is recognized when the related research and development expenses are incurred (see Note 15).

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 balance sheet date reported. As of March 31, 2019, deferred grant revenue was immaterial.

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 BioTime common shareholders by the weighted average number of common shares outstanding, net of unvested restricted stock or restricted stock units, subject to repurchase by BioTime, if any, during the period. Diluted earnings per share is calculated by dividing the net income or loss attributable to BioTime 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, 2019, BioTime reported net income attributable to common shareholders, and therefore, did an analysis of common share equivalents to determine their impact on diluted net income, if any. For the three months ended March 31, 2018, BioTime reported a net loss attributable to common shareholders, and therefore, all potentially dilutive common stock was considered antidilutive.

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

	Three Months Ended March 31, (unaudited)	
	2019	2018
Stock options	14,628	9,243
Warrants ⁽¹⁾	-	9,395
BioTime Warrants ⁽²⁾ (Note 3)	533	-
Restricted stock units	278	56

(1) The warrants expired on October 1, 2018.

(2) Although the BioTime warrants are classified as liabilities, these warrants are considered for dilutive earnings per share calculations in accordance with ASC 260, *Earnings Per Share*, and determined to be anti-dilutive for the period presented.

Lease accounting and impact of adoption of the new lease standard

On January 1, 2019, BioTime adopted ASU 2016-02, *Leases (Topic 842, “ASC 842”)* and its subsequent amendments affecting BioTime: (i) ASU 2018-10, *Codification Improvements to Topic 842, Leases*, and (ii) ASU 2018-11, *Leases (Topic 842): Targeted improvements*, using the modified retrospective method (see Note 15).

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

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

Operating leases are included as right-of-use assets in property and equipment (see Note 15), and ROU lease liabilities, current and long-term, in the condensed consolidated balance sheets. Financing leases are included in property and equipment, and in financing lease liabilities, current and long-term, in BioTime’s condensed consolidated balance sheets.

In connection with the adoption on ASC 842 on January 1, 2019, BioTime derecognized net book value of leasehold improvements and corresponding lease liabilities of \$1.9 million and \$2.0 million, respectively, which was the carrying value of certain operating leases as of December 31, 2018, included in property and equipment and lease liabilities, respectively, recorded pursuant to build to suit lease accounting under the previous ASC 840 lease standard. The derecognition of these amounts from the superseded ASC 840 lease standard was offset by a cumulative effect adjustment of \$0.1 million as a reduction of BioTime’s accumulated deficit on January 1, 2019. These build to suit leases were primarily related to the Alameda and the Cell Cure Leases described in Note 15. ASC 842 requires build to suit leases recognized on BioTime’s consolidated balance sheets as of December 31, 2018 to be derecognized upon the adoption of the new lease standard and be recognized in accordance with the new standard on January 1, 2019.

The adoption of ASC 842 had a material impact in BioTime’s consolidated balance sheets, with the most significant impact resulting from the recognition of ROU assets and lease liabilities for operating leases with remaining terms greater than twelve months on the adoption date (see Note 15). BioTime’s accounting for financing leases (previously referred to as “capital leases”) remained substantially unchanged.

Other recently adopted accounting pronouncements

Adoption of ASU 2016-18, Statement of Cash Flows (Topic 230) – On January 1, 2018, BioTime adopted ASU 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*, which requires that the statement of cash flows explain the change during the period in the total of cash, cash equivalents and restricted cash, and that restricted cash be included with 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 adoption of ASU 2016-18 did not have a material effect on BioTime’s condensed consolidated financial statements. However, prior period restricted cash balances included in prepaid expenses and other current assets, and in deposits and other long-term assets, on the condensed consolidated balance sheets was added to the beginning-of-period and end-of-period total consolidated cash and cash equivalents in the condensed consolidated statements of cash flows to conform to the current presentation shown below.

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 and effected by the adoption of ASU 2016-18 (in thousands):

	March 31, 2019	December 31, 2018	March 31, 2018	December 31, 2017
	(unaudited)		(unaudited)	
Cash and cash equivalents	\$ 18,011	\$ 23,587	\$ 29,827	\$ 36,838
Restricted cash included in prepaid expenses and other current assets (see Note 15)	-	346	346	-
Restricted cash included in deposits and other long-term assets (see Note 15)	679	466	78	847
Total cash, cash equivalents, and restricted cash as shown in the condensed consolidated statements of cash flows	<u>\$ 18,690</u>	<u>\$ 24,399</u>	<u>\$ 30,251</u>	<u>\$ 37,685</u>

Adoption of ASU 2016-01, Financial Instruments—Overall: Recognition and Measurement of Financial Assets and Financial Liabilities – Changes to the current GAAP model under ASU 2016-01 primarily affects the accounting for equity investments, financial liabilities under the fair value option, and the presentation and disclosure requirements for financial instruments. In addition, ASU 2016-01 clarified guidance related to the valuation allowance assessment when recognizing deferred tax assets resulting from unrealized losses on available-for-sale debt securities. The accounting for other financial instruments, such as loans, investments in debt securities, and financial liabilities is largely unchanged. The more significant amendments are to equity investments in unconsolidated entities. In accordance with ASU No. 2016-01, all equity investments in unconsolidated entities (other than those accounted for using the equity method of accounting) will generally be measured at fair value through earnings. There will no longer be an available-for-sale classification (changes in fair value reported in other comprehensive income) for equity securities with readily determinable fair values. As further discussed above under the *marketable equity securities* policy, BioTime adopted ASU 2016-01 on January 1, 2018.

Adoption of ASU 2018-07, Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting - In June 2018, the FASB issued ASU 2018-07, *Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*, which simplifies the accounting for non-employee share-based payment transactions. The new standard expands the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from non-employees. ASU 2018-07 is effective for fiscal years beginning after December 15, 2018 (including interim periods within that fiscal year). BioTime adopted ASU 2018-07 on January 1, 2019. As BioTime does not have a significant number of nonemployee share-based awards, the application of the new standard did not have a material impact on its consolidated financial statements.

Recently Issued Accounting Pronouncements Not Yet Adopted – The recently issued accounting pronouncements applicable to BioTime that are not yet effective should be read in conjunction with the recently issued accounting pronouncements, as applicable and disclosed in BioTime’s Annual Report on Form 10-K for the year ended December 31, 2018.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*, which modifies certain disclosure requirements for reporting fair value measurements. ASU 2018-13 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted. BioTime will adopt this standard on January 1, 2020 and is currently evaluating the disclosure requirements and its effect on the consolidated financial statements.

3. Asterias Merger

On March 8, 2019, the Asterias Merger closed with Asterias surviving as a wholly-owned subsidiary of BioTime. The former stockholders of Asterias (other than BioTime) received 0.71 shares of BioTime common stock (the “Merger Consideration”) for every share of Asterias common stock they owned (the “Merger Exchange Ratio”). BioTime issued 24,695,898 shares of common stock, 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 fair value of such shares, based on the closing price of BioTime common stock on March 8, 2019, was \$32.4 million.

In connection with the closing of the Asterias Merger, BioTime assumed outstanding warrants to purchase shares of Asterias common stock, as further discussed below and in Note 11, and assumed sponsorship of the Asterias 2013 Equity Incentive Plan (see Note 12). All stock options to purchase shares of Asterias common stock outstanding immediately prior to the closing of the Asterias Merger were canceled at the closing for no consideration.

As of March 31, 2019, the assets and liabilities of Asterias have been included in the condensed consolidated balance sheet of BioTime. The results of operations of Asterias from March 8, 2019 through March 31, 2019 have been included in the condensed consolidated statement of operations of BioTime for the three months ended March 31, 2019.

Calculation of the purchase price

The calculation of the purchase price for the Asterias Merger and the Merger Consideration transferred on March 8, 2019 was as follows (in thousands, except for share and per share amounts):

	BioTime (38% ownership interest)	Shareholders other than BioTime (approximate 62% ownership interest)	Total
Outstanding Asterias common stock as of March 8, 2019	21,747,569	34,783,333 ⁽¹⁾	56,530,902 ⁽¹⁾
Exchange ratio	0.710	0.710	0.710
BioTime common stock issuable	15,440,774 ⁽²⁾	24,695,898 ⁽³⁾	40,136,672
Per share price of BioTime common stock as of March 8, 2019	\$ 1.31	\$ 1.31	\$ 1.31
Purchase price (in \$000s)	\$ 20,227 ⁽²⁾	\$ 32,353	\$ 52,580

- (1) Includes 81,810 shares of Asterias restricted stock unit awards that immediately vested on March 8, 2019 and converted into the right to receive shares of BioTime common stock based on the Merger Exchange Ratio, resulting in 58,085 shares of BioTime common stock issued on March 8, 2019 as part of the Merger Consideration. These restricted stock units were principally attributable to pre-combination services and included as part of the purchase price in accordance with ASC 805. See Note 12 for Asterias restricted stock units that vested on the closing of the Asterias Merger attributable to post-combination services that were recorded outside of the purchase price as an immediate charge to stock-based compensation expense.
- (2) Estimated fair value for BioTime's previously held 38% ownership interest in Asterias common stock is part of the total purchase price of Asterias for purposes of the purchase price allocation under ASC 805 and for BioTime's adjustment of its 38% interest to fair value at the effective date of the Asterias Merger and immediately preceding the consolidation of Asterias' results with BioTime. No actual shares of BioTime common stock were issued to BioTime in connection with the Asterias Merger.
- (3) Net of a de minimis number of fractional shares which were paid in cash.

Estimated purchase price allocation

BioTime allocated the acquisition consideration to tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values as of the acquisition date. The fair value of the acquired tangible and identifiable intangible assets were determined based on inputs that are unobservable and significant to the overall fair value measurement. It is also based on estimates and assumptions made by management at the time of the acquisition. As such, this was classified as Level 3 fair value hierarchy measurements and disclosures.

The Merger Consideration allocation below is preliminary and as additional information becomes available, BioTime may further revise the preliminary acquisition consideration allocation. BioTime expects to finalize the acquisition consideration allocation by the end of 2019. Any such revisions or changes may be material.

The following table sets forth a preliminary allocation of the purchase price to Asterias' tangible and identifiable intangible assets acquired and liabilities assumed on the closing of the Asterias Merger, with the excess recorded as goodwill (in thousands):

Assets acquired:	
Cash and cash equivalents	\$ 3,117
Prepaid expenses and other assets, current and noncurrent	660
Machinery and equipment	369
Long-lived intangible assets - royalty contracts	650
Acquired in-process research and development ("IPR&D")	46,540
	<u>51,336</u>
Total assets acquired	<u>51,336</u>
Liabilities assumed:	
Accrued liabilities and accounts payable	1,136
Liability classified warrants	867
Deferred license revenue	200
Long-term deferred income tax liability	12,965
	<u>15,168</u>
Total liabilities assumed	<u>15,168</u>
Net assets acquired, excluding goodwill (a)	<u>36,168</u>
Fair value of BioTime common stock held by Asterias (b)	<u>3,435</u>
Total purchase price (c)	<u>52,580</u>
Estimated goodwill (c-a-b)	<u>\$ 12,977</u>

The valuation of identifiable intangible assets and their estimated useful lives are as follows (in thousands, except for useful life):

	Preliminary Estimated Asset Fair Value	Useful Life (Years)
In process research and development (“IPR&D”)	\$ 46,540	n/a
Royalty contracts	650	5
	<u>\$ 47,190</u>	

The following is a discussion of the valuation methods used to determine the fair value of Asterias’ significant assets and liabilities in connection with the Asterias Merger:

Acquired In-Process Research and Development (“IPR&D”) and Deferred Income Tax Liability – The fair value of identifiable acquired in-process research and development intangible assets consisting of \$31.7 million pertaining to the AST-OPC1 program that is currently in a Phase 1/2a clinical trial for spinal cord injuries (“SCI”), which has been partially funded by the California Institute for Regenerative Medicine and \$14.8 million pertaining to the AST-VAC2 program, which is a non-patient-specific (“off-the-shelf”) cancer immunotherapy derived from pluripotent stem cells for which a clinical trial in non-small cell lung cancer is being funded and sponsored by Cancer Research UK. The identification of these intangible assets are based on consideration of historical experience and a market participant’s view further discussed below; collectively, the AST-OPC1 and the AST-VAC2 are referred to as the “AST-Clinical Programs”. These intangible assets are valued primarily through the use of a probability weighted discounted cash flow method under the income approach further discussed below. BioTime considered the AST-VAC1 program, an autologous product candidate, manufactured from cells that come from the patient, and due to significant risks, substantial costs and limited opportunities in its current state associated with the AST-VAC1 program, BioTime management considered this program to have de minimis value.

BioTime determined that the estimated aggregate fair value of the AST-Clinical programs was \$46.5 million as of the acquisition date using a probability weighted discounted cash flow method for each respective program. This approach estimates the probability of the AST-Clinical Programs achieving successful completion of remaining clinical trials and related approvals into the valuation technique.

To calculate fair value of the AST-Clinical programs under the discounted cash flow method, BioTime used probability-weighted, projected cash flows discounted at a rate considered appropriate given the significant inherent risks associated with cell therapy development by clinical-stage companies. Cash flows were calculated based on estimated projections of revenues and expenses related to each respective program. Cash flows were assumed to extend through a seven-year market exclusivity period for the AST-OPC1 program from the date of market launch. Revenues from commercialization of the AST-Clinical Programs were based on estimated market potential for the indication of each program. The resultant cash flows were then discounted to present value using a weighted-average cost of capital for companies with profiles substantially similar to that of BioTime, which BioTime believes represents the rate that market participants would use to value the assets. BioTime compensated for the phase of development of the program by applying a probability factor to its estimation of the expected future cash flows. The projected cash flows were based on significant assumptions, including the indications in which BioTime will pursue development of the AST-Clinical programs, the time and resources needed to complete the development and regulatory approval, estimates of revenue and operating profit related to the program considering its stage of development, the life of the potential commercialized product, market penetration and competition, and risks associated with achieving commercialization, including delay or failure to obtain regulatory approvals to conduct clinical studies, failure of clinical studies, delay or failure to obtain required market clearances, and intellectual property litigation.

These IPR&D assets are indefinite-lived intangible assets until the completion or abandonment of the associated research and development (“R&D”) efforts. Once the R&D efforts are completed or abandoned, the IPR&D will either be amortized over the asset life as a finite-lived intangible asset or be impaired, respectively, in accordance with ASC 350, *Intangibles – Goodwill and Other*. In accordance with ASC 350, goodwill and acquired IPR&D are determined to have indefinite lives and, therefore, are not amortized. Instead, they are tested for impairment at least annually and between annual tests if BioTime becomes aware of an event or a change in circumstances that would indicate the asset may be impaired.

Because the IPR&D (prior to completion or abandonment of the R&D) is considered an indefinite-lived asset for accounting purposes, the fair value of the IPR&D on the acquisition date creates a deferred income tax liability (“DTL”) in accordance with ASC 740, *Income Taxes* (see Note 13). This DTL is computed using the fair value of the IPR&D assets on the acquisition date multiplied by BioTime’s federal and state income tax rates. While this DTL would reverse on impairment or sale or commencement of amortization of the related intangible assets, those events are not anticipated under ASC 740 for purposes of predicting reversal of a temporary difference to support the realization of deferred tax assets, except for certain deferred tax assets and credit carryforwards that are also indefinite in nature as of the closing of the Asterias Merger, which may be considered for reversal under ASC 740 as further discussed in Note 13.

Royalty contracts – Asterias has certain royalty revenues for “research only use” culture media for pre-clinical research applications under certain, specific patent families under contracts which preclude the customers to sell for commercial use or for clinical trials. These royalty cash flows are generated under certain specific patent families which Asterias previously acquired from Geron Corporation (“Geron”). Asterias pays Geron a royalty for all royalty revenues received from these contracts. Because these patents are a subset of the clinical programs discussed above, are expected to continue to generate revenues for Asterias and are not to be used in the AST-OPC1 or the AST-VAC2 programs, these patents are considered to be separate long-lived intangible assets under ASC 805. These intangible assets are also valued primarily through the use of the discounted cash flow method under the income approach, and will be amortized over their useful life, estimated to be 5 years. The discounted cash flow method estimated the amount of net royalty income that can be expected under the contracts in future years. The amounts were based on observed historical trends in the growth of these revenue streams, and were estimated to terminate in approximately five years, when the key patents under these contracts will begin to expire. The resulting cash flows were discounted to the valuation date based on a rate of return that recognizes a lower level of risk associated with these assets as compared to the AST-Clinical programs discussed above.

Deferred license revenue – In September 2018, Asterias and Novo Nordisk A/S (“Novo Nordisk”) entered into an option for Novo Nordisk or its designated U.S. affiliate to license, on a non-exclusive basis, certain intellectual property related to culturing pluripotent stem cells, such as hES cells, in suspension. Under the terms of the option, Asterias received a one-time upfront payment of \$1.0 million, in exchange for a 24-month period option to negotiate a non-exclusive license during which time Asterias has agreed to not grant any exclusive licenses inconsistent with the Novo Nordisk option. This option is considered a performance obligation as it provides Novo Nordisk with a material right that it would not receive without entering into the contract.

For business combination purposes under ASC 805, the fair value of this performance obligation to BioTime, from a market participant perspective, is the estimated costs BioTime may incur, plus a normal profit margin for the level of effort required to perform under the contract after the acquisition date, assuming Novo Nordisk exercised its option, including, but not limited to, negotiation costs, legal fees, arbitration, if any, and other related costs. Management has estimated those costs, plus a normal profit margin, to be approximately \$200,000 in the estimated purchase price allocation.

Liability classified warrants – On May 13, 2016, in connection with a common stock offering, Asterias issued warrants to purchase 2,959,559 shares of Asterias common stock (the “Asterias Warrants”) with an exercise price of \$4.37 per share that expire in five years from the issuance date, or May 13, 2021. As of the closing of the Asterias Merger, there were 2,813,159 Asterias Warrants outstanding. The Asterias Warrants contain certain provisions in the event of a Fundamental Transaction, as defined in the warrant agreement governing the Asterias Warrants (“Warrant Agreement”), that Asterias or any successor entity will be required to purchase, at a holder’s option, exercisable at any time concurrently with or within thirty days after the consummation of the fundamental transaction, the Asterias Warrants for cash in an amount equal to the calculated value of the unexercised portion of such holder’s warrants, determined in accordance with the Black-Scholes option pricing model with significant inputs as specified in the Warrant Agreement. The Asterias Merger was a Fundamental Transaction for purposes of the Asterias Warrants.

The fair value of the Asterias Warrants was determined by using Black-Scholes option pricing models which take into consideration the probability of the fundamental transaction, which for purposes of the above valuation was assumed to be at 100% and net cash settlement occurring, using the contractual remaining term of the warrants. In applying these models, these inputs included key assumptions including the per share closing price of BioTime common stock on March 8, 2019, volatility computed in accordance with the provisions of the Warrant Agreement and, to a large extent, assumptions based on discussions with a majority of the holders of the Asterias Warrants since the closing of the Asterias Merger to settle the Asterias Warrants in cash or in shares of BioTime common stock. Based on such discussions, BioTime believes the fair value of the Asterias Warrants as of the closing of the Asterias Merger is not subject to change significantly, however, to the extent any Asterias Warrants that were not settled in cash or in BioTime common stock discussed below, were automatically converted to BioTime warrants 30 days after the closing of the Asterias Merger. In April 2019, Asterias Warrants representing approximately \$372,000 in fair value were settled: \$332,000 in fair value was settled in exchange for 251,835 shares of BioTime common stock, and \$40,000 in fair value was settled in exchange for cash. The Asterias Warrants settled in exchange for shares of BioTime common stock were held by Broadwood Partners, L.P., an Asterias and BioTime shareholder. The Asterias Warrants settled in exchange for cash were held by other parties. The remaining Asterias Warrants (representing approximately \$495,000 in fair value as of March 31, 2019) were converted into warrants to purchase shares of BioTime common stock using the Merger Exchange Ratio (the “BioTime Warrants”).

As of March 31, 2019, the total number of shares of BioTime common stock subject to warrants that were assumed by BioTime in connection with the Asterias Merger was 1,997,342, of which 907,442 were settled in April 2019 discussed above and 1,089,900 were converted to BioTime Warrants 30 days after the closing of the Asterias Merger, with similar terms and conditions retained under the BioTime Warrants as per the original Warrant Agreements. The BioTime Warrants have an exercise price of \$6.15 per warrant share and expire on May 13, 2021. BioTime is accounting for the outstanding BioTime Warrants as a liability at fair value, with subsequent changes to the fair value of the BioTime Warrants at each reporting period thereafter included in the consolidated statement of operations.

Fair value of BioTime common stock held by Asterias – As of March 8, 2019, Asterias held 2,621,811 shares of BioTime common stock as marketable securities on its standalone financial statements. The fair value of those shares acquired by BioTime from Asterias is determined based on the \$1.31 per share closing price of BioTime common stock on March 8, 2019. Although treasury shares are not considered an asset and were retired upon BioTime’s acquisition of Asterias, the fair value of those shares is a part of the purchase price allocation shown in the tables above.

Goodwill – Goodwill is calculated as the difference between the acquisition date fair value of the consideration transferred and the values assigned to the assets acquired and liabilities assumed. Goodwill is not amortized but is tested for impairment at least annually, or more frequently if circumstances indicate potential impairment.

Depending on the structure of a particular acquisition, goodwill and identifiable intangible assets may not be deductible for tax purposes. Goodwill recorded in the Asterias Merger is not expected to be deductible for tax purposes (see Note 13).

During the three months ended March 31, 2019, BioTime incurred \$3.5 million in acquisition related costs which were recorded in general and administrative expenses in the accompanying condensed consolidated statements of operations.

Unaudited Supplemental Pro Forma Information

The unaudited supplemental pro forma financial information presented below is for illustrative purposes only and is not necessarily indicative of the financial operations or results of operations that would have been realized if the Asterias Merger had been completed on the date indicated, does not reflect synergies that might have been achieved, nor is it indicative of future operating results or financial position. The pro forma adjustments are based upon currently available information and certain assumptions BioTime believes are reasonable under the circumstances.

The following unaudited supplemental pro forma financial information summarizes the consolidated results of operations for the periods presented, as if the Asterias Merger was completed on January 1, 2018. The unaudited supplemental pro forma information reports actual operating results, adjusted to include the pro forma effect of certain fair value adjustments for acquired items, such as the amortization of identifiable, long-lived intangible assets, depreciation of machinery and equipment, and the related tax effects of the acquisition. It also includes pro forma adjustments to certain items related to the Asterias Merger that were reported separately in each of BioTime and Asterias’ respective statements of operations prior to the Asterias Merger, such as gains and losses reported by BioTime for its 38% ownership interest in Asterias, and gains and losses reported by Asterias for its ownership of BioTime shares held as marketable equity securities.

The unaudited supplemental pro forma financial information for the periods presented is as follows (in thousands, except per share data):

	Three months ended March 31	
	2019	2018
Pro forma net revenue	\$ 877	\$ 974
Pro forma operating expenses	(15,368)	(17,430)
Pro forma loss from operations	(14,491)	(16,456)
Pro forma other income (loss), net	40,537	(33,137)
Pro forma net income (loss) attributable to BioTime shareholders	26,039	(45,038)
Pro forma net income/(loss) per share, basic and diluted	\$ 0.20	\$ (0.30)

Prior to the Asterias Merger being consummated in March 2019, BioTime elected to account for its 21.7 million shares of Asterias common stock at fair value using the equity method of accounting. The fair value of the Asterias shares was approximately \$20.2 million as of March 8, 2019, the closing date of the Asterias Merger, based on \$0.93 per share, which was calculated by multiplying (a) \$1.31, the closing price of BioTime common stock on such date by (b) the Merger Exchange Ratio. The fair value of the Asterias shares was approximately \$13.5 million as of December 31, 2018, based on the closing price of Asterias common stock of \$0.62 per share on such date. Accordingly, BioTime recorded an unrealized gain of \$6.7 million for the three months ended March 31, 2019, representing the change in fair value of Asterias common stock from December 31, 2018 to March 8, 2019. For the three months ended March 31, 2018, BioTime recorded an unrealized loss of \$17.4 million on the Asterias shares due to the decrease in Asterias’ stock price from December 31, 2017 to March 31, 2018 from \$2.25 per share to \$1.45 per share. All share prices were determined based on the closing price of BioTime or Asterias common stock on the NYSE American on the applicable dates.

Asterias Merger Related Litigation – See Note 15 Commitments and Contingencies for discussion regarding litigation related to the Asterias Merger.

4. Equity Method Accounting for Common Stock of OncoCyte, at Fair Value

BioTime elected to account for its 14.7 million shares of OncoCyte common stock at fair value using the equity method of accounting beginning on February 17, 2017, the date of the OncoCyte Deconsolidation. The OncoCyte shares had a fair value of \$58.0 million as of March 31, 2019 and a fair value of \$20.3 million as of December 31, 2018, based on the closing price of OncoCyte of \$3.95 per share and \$1.38 per share on those respective dates.

For the three months ended March 31, 2019, BioTime recorded an unrealized gain of \$37.7 million due to the increase in OncoCyte's stock price from December 31, 2018 to March 31, 2019, from \$1.38 per share to \$3.95 per share. For the three months ended March 31, 2018, BioTime recorded an unrealized loss of \$37.4 million due to the decrease in OncoCyte stock price from December 31, 2017 to March 31, 2018.

All share prices are determined based on the closing price of OncoCyte common stock on the NYSE American on the applicable dates.

OncoCyte's unaudited condensed results of operations for the periods presented are summarized below (in thousands):

	Three Months Ended March 31,	
	2019	2018
<i>Condensed Statement of Operations (1):</i>		
Research and development expense	\$ 1,343	\$ 1,461
General and administrative expense	2,449	1,787
Sales and marketing expense	205	658
Loss from operations	(3,997)	(3,906)
Net loss	(3,864)	(3,778)

5. Sale of Significant Ownership Interest in AgeX to Juvenescence Limited

On August 30, 2018, BioTime entered into a Stock Purchase Agreement with Juvenescence Limited and AgeX, pursuant to which BioTime sold 14.4 million shares of common stock of AgeX to Juvenescence for \$3.00 per share, or an aggregate purchase price of \$43.2 million (the "Purchase Price"). Juvenescence paid \$10.8 million of the Purchase Price at closing, issued an unsecured convertible promissory note dated August 30, 2018 in favor of BioTime for \$21.6 million (the "Promissory Note"), and paid \$10.8 million on November 2, 2018. The Stock Purchase Agreement contains customary representations, warranties and indemnities from BioTime relating to the business of AgeX, including an indemnity cap of \$4.3 million, which is subject to certain exceptions. The transactions contemplated by the Stock Purchase Agreement are referred to as the Juvenescence Transaction in this Report.

The Promissory Note bears interest at 7% per annum, with principal and accrued interest payable at maturity on August 30, 2020. The Promissory Note cannot be prepaid prior to maturity or conversion. On the maturity date, if a "Qualified Financing" (as defined below) has not occurred, BioTime will have the right, but not the obligation, to convert the principal balance of the Promissory Note and accrued interest then due into shares of Series A preferred stock of Juvenescence at a conversion price of \$15.60. Upon the occurrence of a Qualified Financing on or before the maturity date, the principal balance of the Promissory Note and accrued interest will automatically convert into a number of shares of the class of equity securities of Juvenescence sold in the Qualified Financing, at the price per share at which the Juvenescence securities are sold in the Qualified Financing; and, if AgeX common stock is listed on a national securities exchange in the U.S., the number of shares of the class of equity securities issuable upon conversion may be increased depending on the market price of AgeX common stock. A Qualified Financing is generally defined as an underwritten initial public offering of Juvenescence equity securities in which gross proceeds are not less than \$50.0 million. The Promissory Note is not transferable, except in connection with a change of control of BioTime.

For the three months ended March 31, 2019, BioTime recognized \$378,000 in interest income on the Promissory Note. As of March 31, 2019, the principal and accrued interest balance of the Promissory Note was \$22.5 million.

Shareholder Agreement

BioTime and Juvenescence entered into a Shareholder Agreement, dated August 30, 2018, setting forth the governance, approval and voting rights of the parties with respect to their holdings of AgeX common stock, including rights of representation on the AgeX Board of Directors, approval rights, preemptive rights, rights of first refusal and co-sale and drag-along and tag-along rights for so long as either BioTime or Juvenescence continue to own at least 15% of the outstanding shares of AgeX common stock. Under the Shareholder Agreement, Juvenescence and BioTime each had the right to designate two persons to a six-member AgeX Board of Directors, with the remaining two individuals to be independent of Juvenescence and BioTime. Following Juvenescence's payment of \$10.8 million on November 2, 2018 under the Stock Purchase Agreement, Juvenescence had the right to designate an additional member of the AgeX Board of Directors. As of April 30, 2019, Juvenescence has not exercised such right. Immediately following the AgeX Distribution on November 28, 2018 (see Note 6), BioTime owned 1.7 million shares of AgeX common stock, representing 4.8% of AgeX's then issued and outstanding shares of common stock. Accordingly, in accordance with the Shareholder Agreement, as of November 28, 2018, BioTime had no right to designate any member to the AgeX Board of Directors.

In connection with the Juvenescence Transaction, the termination provision of the Shared Facilities Agreement (see Note 10) entitling AgeX or BioTime to terminate the agreement upon six months advance written notice was amended. Pursuant to the amendment, following the deconsolidation of AgeX from BioTime's consolidated financial statements on August 30, 2018 (see Notes 6 and 10), each party retains the right to terminate the Shared Facilities Agreement at any time by giving the other party six months advance written notice, but BioTime may not do so prior to September 1, 2020.

On May 7, 2019, AgeX provided written notice that it will terminate its use of BioTime's office and laboratory facilities as of July 31, 2019. The other provisions of the Shared Facilities Agreement remain in place at this time.

6. Deconsolidation and Distribution of AgeX

Deconsolidation of AgeX

On August 30, 2018, BioTime sold 14.4 million shares of the common stock of AgeX to Juvenescence (see Note 5). Immediately before that sale, BioTime and Juvenescence owned 80.4% and 5.6%, respectively, of AgeX's outstanding common stock. Immediately following that sale, BioTime and Juvenescence owned 40.2% and 45.8%, respectively, of AgeX's outstanding common stock. As a result, on August 30, 2018, AgeX was no longer a subsidiary of BioTime and, as of that date, BioTime experienced a "loss of control" of AgeX, as defined by GAAP. Loss of control is deemed to have occurred when, among other things, a parent company owns less than a majority of the outstanding common stock of a subsidiary, lacks a controlling financial interest in the subsidiary, and is unable to unilaterally control the subsidiary through other means such as having, or being able to obtain, the power to elect a majority of the subsidiary's Board of Directors based solely on contractual rights or ownership of shares representing a majority of the voting power of the subsidiary's voting securities. All of these loss-of-control factors were present with respect to BioTime's ownership interest in AgeX as of August 30, 2018. Accordingly, BioTime deconsolidated AgeX's consolidated financial statements and consolidated results from BioTime's unaudited condensed consolidated financial statements and consolidated results effective on August 30, 2018, in accordance with ASC, 810-10-40-4(c).

In connection with the Juvenescence Transaction discussed in Note 5 and the AgeX Deconsolidation on August 30, 2018, in accordance with ASC 810-10-40-5, BioTime recorded a gain on deconsolidation of \$78.5 million, which includes a financial reporting gain on the sale of the AgeX shares of \$39.2 million, during the year ended December 31, 2018, included in other income and expenses, net, in the consolidated statements of operations.

Distribution of AgeX Shares

On November 28, 2018, BioTime distributed 12.7 million shares of AgeX common stock owned by BioTime to holders of BioTime common stock, on a pro rata basis, in the ratio of one share of AgeX common stock for every 10 shares of BioTime common stock owned. The AgeX Distribution was accounted for at fair value as a dividend-in-kind in the aggregate amount of \$34.4 million, which was determined by multiplying (a) the 12.7 million shares distributed to BioTime shareholders by (b) \$2.71, the closing price of AgeX common stock on the NYSE American on November 29, 2018, the first trading day of AgeX common stock.

Because BioTime has an accumulated deficit in its consolidated shareholders' equity, the entire fair value of the AgeX Distribution was charged against common stock equity included in the consolidated statements of changes in shareholders' equity for the year ended December 31, 2018.

Immediately following the AgeX Distribution, BioTime owned 1.7 million shares of AgeX common stock, all of which it still owns, and which represents approximately 4.6% of AgeX's outstanding common stock as of March 31, 2019 and which shares BioTime holds as marketable equity securities.

7. Property and Equipment, Net

At March 31, 2019 and December 31, 2018, property and equipment was comprised of the following (in thousands):

	March 31, 2019	December 31, 2018
	(unaudited)	
Equipment, furniture and fixtures	\$ 4,424	\$ 3,842
Leasehold improvements	2,746	3,910
Right-of-use assets ⁽¹⁾	4,946	-
Accumulated depreciation and amortization	(3,198)	(3,185)
Property and equipment, net	8,918	4,567
Construction in progress	-	1,268
Property and equipment, net, and construction in progress	<u>\$ 8,918</u>	<u>\$ 5,835</u>

(1) BioTime adopted ASC 842 on January 1, 2019. For additional information on this standard and right-of-use assets and liabilities see Notes 2 and 15.

Property and equipment at both March 31, 2019 and December 31, 2018 includes \$146,000 in financing leases. Depreciation and amortization expense amounted to \$269,000 and \$281,000 for the three months ended March 31, 2019 and 2018, respectively.

Construction in progress

Construction in progress of \$1.3 million as of December 31, 2018 entirely relates to the leasehold improvements made at Cell Cure's lease facilities in Jerusalem, Israel, primarily financed by the landlord. The leasehold improvements were substantially completed in December 2018 and the assets placed in service in January 2019 (see adoption of ASC 842 impact discussed in Notes 2 and 15).

8. Goodwill and Intangible Assets, Net

At March 31, 2019 and December 31, 2018, goodwill and intangible assets, net consisted of the following (in thousands):

	March 31, 2019	December 31, 2018
	(unaudited)	
Goodwill ⁽¹⁾	<u>\$ 12,977</u>	<u>\$ -</u>
Intangible assets:		
Acquired IPR&D – OPC1 (from the Asterias Merger) ⁽²⁾	\$ 31,700	\$ -
Acquired IPR&D – VAC2 (from the Asterias Merger) ⁽²⁾	14,840	-
Intangible assets subject to amortization:		
Acquired patents	19,010	19,010
Acquired royalty contracts ⁽²⁾	650	
Other	10	10
Total intangible assets	<u>66,210</u>	<u>19,020</u>
Accumulated amortization	(16,381)	(15,895)
Intangible assets, net	<u>\$ 49,829</u>	<u>\$ 3,125</u>

(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 3).

(2) See Note 3 for information on the Asterias Merger which was consummated on March 8, 2019.

BioTime recognized in research and development expenses \$485,000 and \$582,000 of amortization expense in each of the three months ended March 31, 2019 and 2018, respectively.

9. Accounts Payable and Accrued Liabilities

At March 31, 2019 and December 31, 2018, accounts payable and accrued liabilities consisted of the following (in thousands):

	<u>March 31,</u> <u>2019</u> (unaudited)	<u>December 31,</u> <u>2018</u>
Accounts payable ⁽¹⁾	\$ 1,379	\$ 2,359
Accrued compensation ⁽²⁾	3,457	2,456
Accrued liabilities ⁽³⁾	2,476	1,639
Other current liabilities	24	9
Total	<u>\$ 7,336</u>	<u>\$ 6,463</u>

(1) Includes \$0.1 million of transaction costs related to the Asterias Merger (see Note 3) recorded outside of the business combination.

(2) Includes \$2.0 million of change of control and related transaction costs related to the Asterias Merger (see Note 3) recorded outside of the business combination.

(3) Includes \$0.6 million of transaction costs related to the Asterias Merger (see Note 3) recorded outside of the business combination.

In connection with the Asterias Merger, several Asterias employees were terminated as of the Asterias Merger date. Three of these employees had employment agreements with Asterias which entitled them to change in control and separation payments in the aggregate of \$2.0 million, which such conditions were met on the Asterias Merger date. Accordingly, \$2.0 million was accrued and recorded in general and administrative expenses on the merger date and paid in April 2019.

Additionally, BioTime entered into a plan of termination with substantially all other previous employees of Asterias with potential separation payments in the aggregate of \$0.5 million. Termination dates for these individuals range from May 31, 2019 to June 28, 2019. These employees must provide services related to the transition and be an employee of the combined company as of their date of termination in order to receive separation benefits. Since the employees are required to render future services after the merger date, BioTime will record the aggregate liability ratably over their respective service periods from the Asterias Merger date through the above termination dates, in accordance with ASC 420, *Exit or Disposal Cost Obligations*. As of March 31, 2019, a total of \$0.1 million was accrued for these separation payments which represents the portion of the payments earned through March 31, 2019.

10. Related Party Transactions

Shared Facilities and Service Agreements with Affiliates

The receivables from affiliates shown on the condensed consolidated balance sheet as of December 31, 2018, primarily represent amounts owed to BioTime by OncoCyte and AgeX under separate Shared Facilities and Service Agreements (each a “Shared Facilities Agreement”), with amounts owed by OncoCyte comprising most of that amount. These outstanding amounts were paid in full in the first quarter of 2019. Under the terms of the Shared Facilities Agreements, BioTime allows OncoCyte and AgeX to use BioTime’s premises and equipment located at BioTime’s headquarters in Alameda, California for the purpose of conducting business. BioTime also provides accounting, billing, bookkeeping, payroll, treasury, payment of accounts payable, and other similar administrative services to OncoCyte and AgeX. BioTime may also provide the services of attorneys, accountants, and other professionals who may provide professional services to BioTime and its other subsidiaries. BioTime also has provided OncoCyte and AgeX with the services of laboratory and research personnel, including BioTime employees and contractors, for the performance of research and development work for OncoCyte and AgeX at the premises.

BioTime charges OncoCyte and AgeX a “Use Fee” for services provided and for use of BioTime facilities, equipment, and supplies. For each billing period, BioTime prorates and allocates to OncoCyte and AgeX costs incurred, including costs for services of BioTime employees and use of equipment, insurance, leased space, professional services, software licenses, supplies and utilities. The allocation of costs depends on key cost drivers, including actual documented use, square footage of facilities used, time spent, costs incurred by BioTime for OncoCyte and AgeX, or upon proportionate usage by BioTime, OncoCyte and AgeX, as reasonably estimated by BioTime. BioTime, at its discretion, has the right to charge OncoCyte and AgeX a 5% markup on such allocated costs. The allocated cost of BioTime employees and contractors who provide services is based upon the number of hours or estimated percentage of efforts of such personnel devoted to the performance of services.

The Use Fee is determined and invoiced to OncoCyte and AgeX on a regular basis, generally monthly or quarterly. Each invoice is payable in full within 30 days after receipt. Any invoice, or portion thereof, not paid in full when due will bear interest at the rate of 15% per annum until paid, unless the failure to make a payment is due to any inaction or delay in making a payment by BioTime. Through March 31, 2019, BioTime has not charged OncoCyte or AgeX any interest.

In addition to the Use Fee, OncoCyte and AgeX reimburse BioTime for any out of pocket costs incurred by BioTime for the purchase of office supplies, laboratory supplies, and other goods and materials and services for the account or use of OncoCyte or AgeX. BioTime is not obligated to purchase or acquire any office supplies or other goods and materials or any services for OncoCyte or AgeX, and if any such supplies, goods, materials or services are obtained, BioTime may arrange for the suppliers to invoice OncoCyte or AgeX directly.

The Shared Facilities Agreements remain in effect until a party gives the other party written notice that the Shared Facilities Agreement will terminate on December 31 of that year, or unless it is otherwise terminated under another provision of the agreement. In addition, BioTime and AgeX may each terminate their Shared Facilities Agreement prior to December 31 of the year by giving the other party written six months' notice to terminate, but BioTime may not do so prior to September 1, 2020.

In the aggregate, BioTime charged Use Fees to OncoCyte and AgeX as follows (in thousands):

	Three Months Ended March 31, (unaudited)	
	2019	2018
Research and development	\$ 232	\$ 220
General and administrative	493	171
Total use fees	\$ 725	391

The Use Fees charged to OncoCyte and AgeX shown above are not reflected in revenues, but instead BioTime's general and administrative expenses and research and development expenses are shown net of those charges in the condensed consolidated statements of operations.

BioTime accounts for receivables from affiliates, net of payables to affiliates, if any, for similar shared services and other transactions BioTime's consolidated subsidiaries may enter into with nonconsolidated affiliates. BioTime and the affiliates record those receivables and payables on a net basis since BioTime and the affiliates intend to exercise a right of offset of the receivable and the payable and to settle the balances net by having the party that owes the other party pay the net balance owed.

Transactions with Ascendance Biotechnology, Inc.

On March 21, 2018, AgeX and Ascendance Biotechnology, Inc. ("Ascendance"), an equity method investee of AgeX and former equity method investee of BioTime, entered into an Asset Purchase Agreement (the "Asset Agreement") in which AgeX purchased for \$800,000 in cash certain assets consisting primarily of in-process research and development assets related to stem cell derived cardiomyocytes (heart muscle cells) to be developed by AgeX. The transaction was considered an asset acquisition rather than a business combination in accordance with ASC 805-50, *Business Combinations*. Accordingly, the \$800,000 purchase price was expensed on the acquisition date as acquired in-process research and development as those assets have no alternative future use. Also, on March 21, 2018, BioTime received \$0.2 million from Ascendance as settlement of its accounts receivable from Ascendance.

Disposition of ownership interest in Ascendance

On March 23, 2018, Ascendance was acquired by a third party in a merger through which AgeX received approximately \$3.2 million in cash for its shares of Ascendance common stock. AgeX recognized a \$3.2 million gain on the sale of its equity method investment in Ascendance, which is included in other income and expenses, net, for the three months ended March 31, 2018.

Other related party transactions

In February 2018, Alfred D. Kingsley, the Chairman of BioTime's Board of Directors and a former officer and director of AgeX, purchased AgeX stock purchase warrants entitling him to purchase 248,600 shares of AgeX common stock at an exercise price of \$2.50 per share. AgeX received \$124,300, or \$0.50 per warrant, from Mr. Kingsley. The warrants were sold to Mr. Kingsley on the same terms as other warrants were sold by AgeX to other unaffiliated investors.

BioTime currently pays \$5,050 per month for the use of approximately 900 square feet of office space in New York City, which is made available to BioTime on a month-by-month basis by one of its directors at an amount that approximates his cost (see Note 15).

In April 2019, BioTime issued 251,835 shares of BioTime common stock to Broadwood Partners, L.P., an Asterias and BioTime shareholder, in exchange for the settlement of Asterias Warrants in connection with the Asterias Merger (see Note 3).

11. Shareholders' Equity

Preferred Shares

BioTime is authorized to issue 2,000,000 preferred shares. The preferred shares may be issued in one or more series as the board of directors may determine by resolution. The 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 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. There are no preferred shares issued and outstanding.

Common Shares

At March 31, 2019, BioTime was authorized to issue 250,000,000 common shares, no par value. As of March 31, 2019, and December 31, 2018, BioTime had 149,387,601 and 127,135,774 issued and outstanding common shares, respectively.

In April 2017, BioTime entered into a Controlled Equity OfferingSM Sales Agreement (the "Sales Agreement") with Cantor Fitzgerald & Co., as sales agent ("Cantor Fitzgerald"), pursuant to which BioTime may offer and sell, from time to time, through Cantor Fitzgerald, shares of BioTime common stock having an aggregate offering price of up to \$25,000,000. BioTime is not obligated to sell any shares under the Sales Agreement. Subject to the terms and conditions of the Sales Agreement, Cantor Fitzgerald will use commercially reasonable efforts, consistent with its normal trading and sales practices, applicable state and federal law, rules and regulations, and the rules of the NYSE American, to sell the shares from time to time based upon BioTime's instructions, including any price, time or size limits specified by BioTime. Under the Sales Agreement, Cantor Fitzgerald may sell the shares by any method deemed to be an "at-the-market" offering as defined in Rule 415(a)(4) under the Securities Act of 1933, as amended, or by any other method permitted by law, including in privately negotiated transactions. Cantor Fitzgerald's obligations to sell the shares under the Sales Agreement are subject to satisfaction of certain conditions, including the continued effectiveness of BioTime's Registration Statement on Form S-3, which became effective on May 5, 2017. As of March 31, 2019, \$24.2 million remained available for sale through the Sales Agreement.

BioTime agreed to pay Cantor Fitzgerald a commission of 3.0% of the aggregate gross proceeds from each sale of shares, reimburse legal fees and disbursements and provide Cantor Fitzgerald with customary indemnification and contribution rights. The Sales Agreement may be terminated by Cantor Fitzgerald or BioTime 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 BioTime'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 Shareholder's Equity

The following tables document the changes in shareholder's equity for the periods from December 31, 2017 to March 31, 2018 and December 31, 2018 to March 31, 2019 (unaudited and in thousands).

	Preferred Shares		Common Shares		Accumulated Deficit	Noncontrolling Interest/(Deficit)	Accumulated Other Comprehensive Income/(Loss)	Total Shareholders' Equity
	Number of Shares	Amount	Number of Shares	Amount				
BALANCE AT DECEMBER 31, 2017	-	\$ -	126,866	\$ 378,487	\$ (216,297)	\$ 1,622	\$ 451	\$ 164,263
Cumulative-effect adjustment for adoption of ASU 2016-01 on January 1, 2018	-	-	-	-	328	-	(328)	-
Cumulative-effect adjustment for adoption of Accounting Standard Codification, Topic 606, on January 1, 2018	-	-	-	-	101	-	-	101
Shares issued upon vesting of restricted stock units, net of shares retired to pay employees' taxes	-	-	3	(7)	-	-	-	(7)
Stock-based compensation	-	-	-	809	-	-	-	809
Stock-based compensation in subsidiaries	-	-	-	-	-	175	-	175
Sale of subsidiary warrants in AgeX	-	-	-	-	-	737	-	737
Subsidiary financing transactions with noncontrolling interests – AgeX	-	-	-	(103)	-	103	-	-
Foreign currency translation adjustments	-	-	-	-	-	-	75	75
NET LOSS	-	-	-	-	(63,548)	(150)	-	(63,698)
BALANCE AT MARCH 31, 2018	-	\$ -	126,869	\$ 379,186	\$ (279,416)	\$ 2,487	\$ 198	\$ 102,455

	Preferred Shares		Common Shares		Accumulated Deficit	Noncontrolling Interest/(Deficit)	Accumulated Other Comprehensive Income/(Loss)	Total Shareholders' Equity
	Number of Shares	Amount	Number of Shares	Amount				
BALANCE AT DECEMBER 31, 2018	-	\$ -	127,136	\$ 354,270	\$ (261,856)	\$ (1,594)	\$ 1,426	\$ 92,246
Shares issued in connection with the Asterias Merger	-	-	24,696	32,353	-	-	-	32,353
Shares retired in connection with the Asterias Merger	-	-	(2,622)	(3,435)	-	-	-	(3,435)
Shares issued upon vesting of restricted stock units, net of shares retired to pay employees' taxes	-	-	118	(75)	-	-	-	(75)
Stock-based compensation	-	-	-	1,361	-	-	-	1,361
Stock-based compensation for shares issued upon vesting of Asterias restricted stock units attributable to post combination services	-	-	60	79	-	-	-	79
Adjustment upon adoption of ASC 842	-	-	-	-	143	-	-	143
Tax effect of accumulated other comprehensive income	-	-	-	-	-	-	(732)	(732)
NET INCOME/(LOSS)	-	-	-	-	39,310	(14)	-	39,296
BALANCE AT MARCH 31, 2019	-	\$ -	149,388	\$ 384,553	\$ (222,403)	\$ (1,608)	\$ 694	\$ 161,236

Warrants

BioTime (previously Asterias) Warrants – Liability Classified

In March 2019, in connection with the closing of the Asterias Merger, BioTime assumed outstanding Asterias Warrants. As of March 31, 2019, the total number of shares of BioTime common stock subject to warrants that were assumed by BioTime in connection with the Asterias Merger was 1,997,342, of which 907,442 with a fair value of \$372,000 as of March 31, 2019 were settled in April 2019, and 1,089,900 (representing approximately \$495,000 in fair value as of March 31, 2019) were converted to BioTime Warrants 30 days after the closing of the Asterias Merger, with similar terms and conditions retained under the BioTime Warrants as per the original Warrant Agreements. The BioTime Warrants have an exercise price of \$6.15 per warrant share and expire on May 13, 2021. BioTime is accounting for the outstanding BioTime Warrants as a liability at fair value, with subsequent changes to the fair value of the BioTime Warrants at each reporting period thereafter included in the consolidated statement of operations (see Note 3).

Cell Cure Warrants – Liability Classified

Cell Cure has two sets of issued warrants. Warrants to purchase 24,566 Cell Cure ordinary shares at an exercise price of \$40.5359 were issued to Hadasit Bio-Holdings, Ltd. in July 2017. These warrants expire in July 2022. Warrants to purchase 13,738 Cell Cure ordinary shares at exercise prices ranging from \$32.02 to \$40.00 per share have been issued to consultants. These warrants expire in October 2020 and January 2024.

ASC 815 requires freestanding financial instruments, such as warrants, with exercise prices denominated in currencies other than the functional currency of the issuer to be accounted for as liabilities at fair value, with all subsequent changes in fair value after the issuance date to be recorded as gains or losses in the consolidated statements of operations.

As of March 31, 2019 and December 31, 2018, the total value of all warrants issued by Cell Cure was \$1.2 million and \$0.4 million, respectively. Such warrants are classified as long-term liabilities on the condensed consolidated balance sheets.

12. Stock-Based Awards

Equity Incentive Plan Awards

BioTime adopted a 2012 Equity Incentive Plan (the “2012 Plan”), under which a maximum of 16,000,000 common shares are available for the grant of stock options, restricted stock, restricted stock units and stock appreciation rights.

In January and February 2019, BioTime granted stock options to purchase 1.7 million common shares with exercise prices ranging from \$1.08 to \$1.14 per share to its employees, including to its new Chief Financial Officer hired in January 2019, under the 2012 Plan. These grants are subject to the customary vesting terms and conditions in accordance with the 2012 Plan.

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

	Shares Available for Grant	Number of Options Outstanding	Number of RSUs Outstanding	Weighted Average Exercise Price
December 31, 2018	1,885	13,867	402	\$ 2.44
AgeX distribution adjustment	117	(2)	3	-
Restricted stock units vested	-	-	(129)	-
Options granted	(1,788)	1,788	-	1.14
Options exercised	-	-	-	-
Options forfeited/cancelled	769	(769)	-	1.92
March 31, 2019	<u>983</u>	<u>14,884</u>	<u>276</u>	<u>2.81</u>
Options exercisable at March 31, 2019		<u>8,927</u>		<u>\$ 3.21</u>

At the effective time of the Asterias Merger, BioTime assumed sponsorship of the Asterias 2013 Equity Incentive Plan (the “Asterias Equity Plan”), with references to Asterias and Asterias common stock therein to be deemed references to BioTime and BioTime common stock. There were 7,309,184 shares available under Asterias Equity Plan immediately before the closing of the Asterias Merger, which became 5,189,520 shares immediately following the Asterias Merger. The shares available under the Asterias Equity Plan will be for awards granted to those former Asterias employees who continued as BioTime employees upon consummation of the Asterias Merger. A summary of activity under the Asterias Equity Plan from the closing date of the Asterias Merger through March 31, 2019 is as follows (in thousands, except per share amounts):

	Shares Available for Grant	Number of Options Outstanding	Number of RSUs Outstanding	Weighted Average Exercise Price
March 8, 2019	5,190	-	-	\$ -
Options granted	(490)	490	-	1.59
Options exercised	-	-	-	-
Options forfeited/cancelled	-	-	-	-
March 31, 2019	<u>4,700</u>	<u>490</u>	<u>-</u>	<u>1.59</u>
Options exercisable at March 31, 2019		<u>-</u>		<u>\$ -</u>

Stock-based compensation expense

The fair value of each option award 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)	
	2019	2018
Expected life (in years)	6.04	5.87
Risk-free interest rates	2.5%	2.6%
Volatility	64.0%	56.1%
Dividend yield	-%	- %

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

	Three Months Ended March 31, (unaudited)	
	2019	2018
Research and development	\$ 122	\$ 193
General and administrative	1,318	791
Total stock-based compensation expense	<u>\$ 1,440</u>	<u>\$ 984</u>

The expense related to 84,940 shares of Asterias restricted stock unit awards that immediately vested on the closing of the Asterias Merger and converted into the right to receive shares of BioTime common stock based on the Merger Exchange Ratio, resulting in 60,304 shares of BioTime common stock issued on March 8, 2019, which were included in stock-based compensation expense for the three months ended March 31, 2019. The expense was not included as part of the purchase price of the Asterias Merger because these awards were principally attributable to post-combination services.

13. 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 BioTime 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 BioTime cannot reliably estimate on an annual basis (principally unrealized gains or losses generated by changes in the market prices of the OncoCyte, and AgeX shares of common stock BioTime holds, and prior to March 8, 2019, Asterias shares BioTime held), BioTime 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.

Although the deconsolidation of OncoCyte was not a taxable transaction to BioTime and did not create a current income tax payment obligation to BioTime, the market value of the shares of OncoCyte common stock BioTime holds creates a deferred tax liability to BioTime based on the closing prices of the shares, less BioTime's tax basis in the shares. The deferred tax liability generated by the OncoCyte shares that BioTime holds as of March 31, 2019, is a source of future taxable income to BioTime, 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 deferred tax liability. This deferred tax liability is determined based on the closing prices of the OncoCyte shares as of March 31, 2019. Due to the inherent unpredictability of future prices of those shares, BioTime cannot reliably estimate or project those deferred tax liabilities on an annual basis. Therefore, the deferred tax liability 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.

Prior to the Asterias Merger discussed in Note 3, the Asterias shares of common stock BioTime held generated similar deferred tax liabilities to BioTime as the OncoCyte shares discussed above. As of the Asterias Merger date and due to Asterias becoming a wholly-owned subsidiary of BioTime, the Asterias deferred tax liabilities were eliminated with a corresponding adjustment to BioTime's valuation allowance, resulting in no tax provision or benefit from this adjustment.

On March 23, 2018, Ascendance was acquired by a third party in a merger through which AgeX received approximately \$3.2 million in cash for its shares of Ascendance common stock. For financial reporting purposes, AgeX recognized a \$3.2 million gain as a sale of its equity method investment in Ascendance. The sale was a taxable transaction to AgeX generating a taxable gain of approximately \$2.2 million. BioTime had sufficient losses from operations to offset the entire gain resulting in no income taxes due.

The income tax consequences of the AgeX Deconsolidation are discussed below.

The Juvenescence Transaction discussed in Note 5 was a taxable event for BioTime that resulted in a gross taxable gain of approximately \$29.4 million, which BioTime fully offset with available net operating losses (“NOL”) and NOL carryforwards, resulting in no net income taxes due. Although the AgeX Deconsolidation on August 30, 2018 was not a taxable transaction to BioTime and did not result in a current tax payment obligation, the unrealized financial reporting gain (see Note 6) on the AgeX Deconsolidation generated a deferred tax liability in accordance with ASC 740, primarily representing BioTime’s difference between book and tax basis of AgeX common stock on the AgeX Deconsolidation date. This deferred tax liability was fully offset by a corresponding release of BioTime’s valuation allowance on deferred tax assets, resulting in no income tax provision or benefit from the AgeX Deconsolidation. The deferred tax liabilities on BioTime’s investments in OncoCyte, Asterias and AgeX are considered to be sources of taxable income 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 those deferred tax liabilities, thereby reducing the need for a valuation allowance.

The distribution of AgeX shares of common stock to BioTime shareholders (see Note 6) on November 28, 2018 was a taxable event for BioTime that resulted in a gross taxable gain of approximately \$26.4 million, which was fully offset by NOL carryforwards, resulting in no income taxes due.

In connection with the Asterias Merger, a deferred tax liability of \$13.0 million was recorded as part of the acquisition accounting (see Note 3). The deferred tax liability (“DTL”) is related to fair value adjustments for the assets and liabilities acquired in the Asterias Merger, principally consisting of IPR&D. This estimate of deferred taxes was determined based on the excess of the estimated fair values of the acquired assets and liabilities over the tax basis of the assets and liabilities acquired. The statutory tax rate was applied, as appropriate, to the adjustment based on the jurisdiction in which the adjustment is expected to occur. This estimate of deferred income tax liabilities is preliminary and is subject to change based upon BioTime’s final determination of the fair value of assets acquired and liabilities assumed. Because the IPR&D (prior to completion or abandonment of the R&D) is considered an indefinite-lived asset for accounting purposes, the fair value of the IPR&D on the acquisition date creates a deferred income tax liability in accordance with ASC 740. This DTL is computed using the fair value of the IPR&D assets on the acquisition date multiplied by BioTime’s respective federal and state income tax rates. While this DTL would reverse on impairment or sale or commencement of amortization of the related intangible assets, those events are not anticipated under ASC 740 for purposes of predicting reversal of a temporary difference to support the realization of deferred tax assets, except for certain deferred tax assets and credit carryforwards that are also indefinite in nature as of the Asterias Merger date, which may be considered for reversal under ASC 740 as further discussed below.

A valuation allowance is provided when it is more likely than not that some portion of the deferred tax assets will not be realized. For federal and state income tax purposes, as a result of the deconsolidation of AgeX, Asterias and OncoCyte and the deferred tax liabilities generated from the market values of AgeX, Asterias and OncoCyte shares from the respective deconsolidation dates, including the changes to those deferred tax liabilities due to changes in the AgeX, Asterias and OncoCyte stock prices, BioTime’s deferred tax assets exceeded its deferred tax liabilities as of December 31, 2018. As a result, BioTime 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.

For the three months ended March 31, 2019, BioTime reversed a portion of its valuation allowance. The partial reversal of the historical valuation allowance is related to BioTime’s deferred tax assets and credit carryforwards and is due to the acquired taxable temporary differences, primarily consisting of the acquired IPR&D discussed above and in Notes 3 and 8. ASC 740 allows for deferred tax assets and credit carryforwards, that are both available and indefinite in nature, to be used against similar deferred tax liabilities as a source of income to support the realization of those deferred tax assets and credit carryforwards. Any benefit recognized from such a reversal of the valuation allowance is recorded outside of the acquisition accounting. Accordingly, the \$4.4 million valuation allowance release and the corresponding tax benefit was primarily related to state research and development credits, including current year federal net operating losses generated for the three months ended March 31, 2019, both of which are available and indefinite in nature.

BioTime did not record any provision or benefit for income taxes for the three months ended March 31, 2018 as BioTime had a full valuation allowance for the period presented.

14. Supplemental Cash Flow Information

Non-cash investing and financing transactions presented separately from the condensed consolidated statements of cash flows for the three months ended March 31, 2019 and 2018 are as follows (in thousands):

	Three Months Ended March 31, (unaudited)	
	2019	2018
Supplemental disclosures of non-cash investing and financing activities:		
Issuance of common stock for the Asterias Merger (Note 3)	\$ 32,353	\$ -
Assumption of liabilities in the Asterias Merger (Note 3)	1,136	-
Assumptions of warrants in the Asterias Merger (Note 3)	867	-

15. Commitments and Contingencies

Alameda Lease

In December 2015, BioTime entered into a lease for approximately 30,795 square feet of rentable space in two buildings located in an office park in Alameda, California (the "Alameda Lease"). The term of the Alameda Lease commenced effective February 1, 2016 and expires on January 31, 2023, unless BioTime exercises its option to renew the lease for an additional five years.

Base rent under the Alameda Lease beginning on February 1, 2019 is \$70,521 per month and will increase by approximately 3% annually on every February 1 thereafter during the lease term.

Prior to the adoption of ASC 842 on January 1, 2019 (see Note 2), the lease payments allocated to the lease liability for leasehold improvements reimbursed by the landlord were amortized as debt service on that liability using the effective interest method over the lease term.

See Note 2 discussion of the impact of adoption of ASC 842 on January 1, 2019, and below for the ROU assets and liabilities recorded in connection with the adoption of ASC 842 as of, and during the three months ended March 31, 2019 for the Alameda Lease.

In addition to base rent, BioTime will pay 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. As security for the performance of its obligations under the Alameda Lease, BioTime provided the landlord with a security deposit of approximately \$424,000, which was reduced to \$78,000 on January 24, 2019 in accordance with the terms of the lease. The security deposit amount is considered restricted cash and \$78,000 is included in deposits and other long-term assets as of March 31, 2019 (see Note 2).

New York Leased Office Space

BioTime currently pays \$5,050 per month for the use of approximately 900 square feet of office space in New York City, which is made available to BioTime for use in conducting meetings and other business affairs, on a month-by-month basis, by one of its directors at an amount that approximates his cost. This lease was not in the scope of ASC 842 because it is a month to month lease (see Note 2).

Cell Cure Lease

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, 2020, with two options to extend the lease for 5 years each. Base monthly rent is NIS 37,882 (approximately US \$11,000 per month using the December 31, 2018 exchange rate). 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.

On January 28, 2018, Cell Cure entered into another lease agreement for an additional 934 square meters (approximately 10,054 square feet) of office space in the same facility in Jerusalem, Israel under a lease that expires on December 31, 2025, with two options to extend the lease for 5 years each (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 \$1.1 million using the December 31, 2018 exchange rate) from the landlord. The leasehold improvements were completed in December 2018 and the entire allowance was used. Beginning on January 1, 2019, combined base rent and construction allowance payments for the January 2018 Lease are NIS 93,827 per month (approximately \$26,000 per month).

Prior to the adoption of ASC 842 on January 1, 2019, Cell Cure was considered the owner of the tenant improvements under construction under ASC 840-40-55 as Cell Cure, among other things, had the primary obligation to pay for construction costs and Cell Cure retains exclusive use of the leased facilities for its office, research and cGMP manufacturing facility requirements after construction was completed (“build to suit” lease). In accordance with the ASC 840 guidance, amounts expended by Cell Cure for construction was reported as construction in progress, and the proceeds received from the landlord, if any, are reported as a lease liability. As of December 31, 2018, approximately \$1.1 million under the January 2018 Lease was incurred and recorded as leasehold improvement construction in progress (see Note 7), with a corresponding amount included in long term lease liability representing the full amount utilized from the landlord’s leasehold improvement construction allowance. As of March 31, 2019, the landlord has paid the complete leasehold improvement construction allowance and the property has been placed in service.

See Note 2 discussion of the impact of adoption of ASC 842 on January 1, 2019, and below for the ROU assets and liabilities recorded in connection with the adoption of ASC 842 as of, and during the three months ended March 31, 2019 for the Cell Cure and January 2018 Leases above (the “Cell Cure Leases”).

In December 2018, Cell Cure made a \$388,000 deposit required under the January 2018 Lease, which amount is included in deposits and other long-term assets on the consolidated balance sheet as of December 31, 2018, to be held as restricted cash during the term of the January 2018 Lease.

Adoption of ASC 842

The below tables provide the amounts recorded in connection with the adoption of ASC 842 as of, and during the three months ended March 31, 2019, for BioTime’s operating and financing leases, as applicable.

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

	Three Months Ended March 31, 2019	
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	\$	331
Operating cash flows from financing leases		7
Financing cash flows from financing leases		6

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

	March 31, 2019	
Operating leases		
Right-of-use assets, net	\$	4,678
Right-of-use lease liabilities, current		923
Right-of-use lease liabilities, noncurrent		4,016
Total operating lease liabilities	\$	4,939
Financing leases		
Property and equipment, gross	\$	146
Accumulated depreciation		(28)
Property and equipment, net	\$	118
Current liabilities		32
Long-term liabilities		102
Total finance lease liabilities	\$	134
Weighted average remaining lease term		
Operating leases		4.9 years
Finance leases		4.2 years
Weighted average discount rate		
Operating leases		9.1%
Finance leases		10.0%

Future minimum lease commitments are as follows (in thousands):

	Operating Leases	Finance Leases
Year Ending December 31,		
2019	\$ 994	\$ 33
2020	1,339	43
2021	1,245	36
2022	1,251	36
2023	393	15
Thereafter	<u>1,015</u>	<u>-</u>
Total lease payments	\$ 6,237	\$ 163
Less imputed interest	(1,298)	(29)
Total	<u>\$ 4,939</u>	<u>\$ 134</u>

Research and Option Agreement

On January 5, 2019, BioTime and Orbit Biomedical Limited (“Orbit”) entered into a Research and Option Agreement (the “Orbit Agreement”) for an exclusive partnership to assess Orbit’s vitrectomy-free subretinal injection device as a means of delivering OpRegen in BioTime’s ongoing Phase I/IIa clinical trial. The term of the Orbit Agreement is for one year unless certain research activities and related data specified in the Orbit Agreement is obtained sooner. The access fees payable by BioTime to Orbit for its technology and the injection device are \$2.5 million in the aggregate, of which \$1.25 million was paid in January 2019 upon execution of the Orbit Agreement and the remaining \$1.25 million payment is due on the earlier of (i) six months from the Orbit Agreement date or, (ii) upon completion of certain collaborative research activities using the Orbit technology for the OpRegen Phase I/IIa clinical trial, as specified in the Orbit Agreement. In addition to the access fees, BioTime will pay Orbit for costs of consumables, training services, travel costs and other out of pocket expenses incurred by Orbit for performing services under the Orbit Agreement. BioTime has exclusive rights to the Orbit technology and its injection device for the treatment of dry-AMD during the term of the Orbit Agreement and may extend the term for an additional three months by paying Orbit a cash fee of \$500,000. For the three months ended March 31, 2019, BioTime amortized \$0.6 million of the upfront payment fee included in research and development expenses. As of March 31, 2019, BioTime had not incurred the remaining \$1.25 million access fee.

Litigation

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

On February 19, 2019, a putative shareholder class action lawsuit was filed (captioned *Lampe v. Asterias Biotherapeutics, Inc. et al.*, Case No. RG19007391) in the Superior Court of the State of California, County of Alameda challenging the Asterias Merger. On May 3, 2019, an amended class action complaint (the “Amended Complaint”) was filed. The Amended Complaint names BioTime, Patrick Merger Sub, Inc., the Asterias board of directors, one member of BioTime’s board of directors, and certain stockholders of both BioTime and Asterias. The action was brought by two purported stockholders 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 Amended Complaint alleges, among other things, that the process leading up to the Asterias Merger was conflicted and inadequate, and that the proxy statement filed by Asterias with the Securities and Exchange Commission omits certain material information, which allegedly renders the information disclosed materially misleading. The Amended Complaint seeks, among other things, is that a class be certified, the recovery of monetary damages, and attorneys’ fees and costs.

BioTime believes that the allegations lack merit and intends to vigorously defend all claims asserted. It is impossible at this time to assess whether the outcome of this proceeding will have a material adverse effect on BioTime’s consolidated results of operations, cash flows or financial position. Therefore, in accordance with ASC 450, *Contingencies*, BioTime has not recorded any accrual for a contingent liability associated with this legal proceeding based on its belief that a liability, while possible, is not probable nor estimable, and any range of potential contingent liability amounts cannot be reasonably estimated at this time. BioTime records legal expenses as incurred.

Employment contracts

BioTime has entered into employment agreements with certain executive officers. Under the provisions of the agreements, BioTime 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, BioTime may provide indemnifications of varying scope under BioTime's agreements with other companies or consultants, typically BioTime's clinical research organizations, investigators, clinical sites, suppliers and others. Pursuant to these agreements, BioTime 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 BioTime'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 BioTime 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 BioTime could be required to make under these indemnification agreements will generally not be subject to any specified maximum amount. Historically, BioTime has not been subject to any claims or demands for indemnification. BioTime also maintains various liability insurance policies that provide BioTime with insurance against claims or demands for indemnification in specified circumstances. As a result, BioTime believes the fair value of these indemnification agreements is minimal. Accordingly, BioTime has not recorded any liabilities for these agreements as of March 31, 2019 and December 31, 2018.

Royalty obligations and license fees

BioTime 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 BioTime 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, BioTime or the applicable party to the contract must comply with various conditions including the payment of patent related costs and annual minimum maintenance fees. Annual minimum maintenance fees are approximately \$135,000 to \$150,000 per year. The research and development risk for these products is significant. License fees and related expenses under these agreements were immaterial for the periods presented in the condensed consolidated interim financial statements provided herein.

Grants

Under the terms of the grant agreement between Cell Cure and Israel Innovation Authority ("IIA") (formerly the Office of the Chief Scientist of Israel) of the Ministry of Economy and Industry, for the development of *OpRegen*[®], Cell Cure will be required to pay royalties on future product sales, if any, up to the amounts received from the IIA, plus interest indexed to LIBOR. Cell Cure's research and product development activities under the grant are subject to substantial risks and uncertainties and performed on a best efforts basis. As a result, Cell Cure is not required to make any payments under the grant agreement unless it successfully commercializes *OpRegen*[®]. Accordingly, pursuant to ASC 730-20, the grant is considered a contract to perform research and development services for others and grant revenue is recognized as the related research and development expenses are incurred (see Note 2).

Israeli law pertaining to such government grants contain various conditions, including substantial penalties and restrictions on the transfer of intellectual property, or the manufacture, or both, of products developed under the grant outside of Israel, as defined by the IIA.

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

The matters addressed in this Item 2 that are not historical information constitute “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, including statements about any of the following: any projections of earnings, revenue, gross profit, cash, effective tax rate, use of net operating losses, or any other financial items; the plans, strategies and objectives of management for future operations or prospects for achieving such plans; and any statements of assumptions underlying any of the foregoing. Any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words “believes,” “anticipates,” “plans,” “expects,” “seeks,” “estimates,” and similar expressions are intended to identify forward-looking statements. While BioTime may elect to update forward-looking statements in the future, it specifically disclaims any obligation to do so, even if BioTime’s estimates change, and readers should not rely on those forward-looking statements as representing BioTime’s views as of any date subsequent to the date of the filing of this Quarterly Report. Although we believe that the expectations reflected in these forward-looking statements are reasonable, such statements are inherently subject to risks and BioTime can give no assurances that its expectations will prove to be correct. Actual results could differ materially from those described in this Quarterly Report because of numerous factors, many of which are beyond the control of BioTime. A number of important factors could cause the results of the company to differ materially from those indicated by such forward-looking statements, including those detailed under the heading “Risk Factors” in Part I, Item 1A of BioTime’s Form 10-K for the year ended December 31, 2018.

The following discussion should be read in conjunction with BioTime condensed consolidated interim financial statements and the related notes provided under “Item 1- Financial Statements” above.

Company and Business Overview

We are a clinical-stage biotechnology company developing new cellular therapies for degenerative retinal diseases, neurological conditions associated with demyelination, and aiding the body in detecting and combating cancer. BioTime’s programs are based on our proprietary cell-based therapy platform and associated development and manufacturing capabilities. With this platform, BioTime develops and manufactures specialized, terminally-differentiated human cells from our pluripotent and progenitor cell starting materials. These differentiated cells are developed either to replace or support cells that are dysfunctional or absent due to degenerative disease or traumatic injury, or are administered as a means of helping the body mount an effective immune response to cancer.

We have three cell therapy programs in clinical development:

- *OpRegen*[®], a retinal pigment epithelium cell replacement therapy currently in a Phase I/IIa multicenter clinical trial for the treatment of advanced dry age-related macular degeneration (“dry-AMD”) with geographic atrophy (“OpRegen trial”). Dry-AMD accounts for approximately 85-90% of all age-related macular degeneration cases and is the leading cause of blindness in people over the age of 60. There currently are no therapies approved by the U.S. Food and Drug Administration (“FDA”) for dry-AMD.
- *OPC1*, an oligodendrocyte progenitor cell therapy currently in a Phase I/IIa multicenter clinical trial for acute spinal cord injuries. This clinical trial has been partially funded by the California Institute for Regenerative Medicine (“CIRM”).
- *VAC2*, an allogeneic (non-patient-specific or “off-the-shelf”) cancer immunotherapy of antigen-presenting dendritic cells currently in a Phase I clinical trial in non-small cell lung cancer. This clinical trial is being funded and conducted by Cancer Research UK, the world’s largest independent cancer research charity

We also have cell/drug delivery programs based upon our proprietary *HyStem*[®] cell and drug delivery matrix technology. *HyStem* was designed to support the formulation, transfer, retention, and engraftment of cellular therapies. We also established and support multiple collaborations with both academic and for-profit partners to develop *HyStem* for additional therapeutic uses, and we sell both research and GMP-grade *HyStem* to support additional external research and development activities.

Our lead cell delivery clinical program is *Renevia*[®], a medical device developed as a replacement for whole adipose tissue in cell assisted lipotransfer (CAL) procedures. In a European pivotal clinical trial in patients with HIV-associated facial lipoatrophy, the primary endpoint of change in hemifacial volume at 6 months in treated patients compared to patients in the delayed treatment arm as measured by three-dimensional photographic volumetric assessment was met. In 2018, we submitted a design dossier for EU market clearance (CE Mark) for the use of *Renevia* as a device to aid in transferring a patient’s own adipose tissue to treat certain forms of facial lipoatrophy, or fat loss. We have ongoing discussions with our European notified body and are currently awaiting notification as to its status. We expect to receive a decision from the notified body in the second half of 2019.

We completed our acquisition of the remaining ownership interests in Asterias Biotherapeutics, Inc. on March 8, 2019. We added OPC1 and VAC2 to our cell therapy product portfolio as a result of that acquisition.

We have equity holdings in two publicly traded companies: OncoCyte Corporation (“OncoCyte”) (approximately 28% ownership) and AgeX Therapeutics, Inc. (“AgeX”) (approximately 5% ownership). We founded both companies and they were majority-owned and consolidated subsidiaries. OncoCyte (NYSE American: OCX) is developing confirmatory diagnostic tests for lung cancer utilizing novel liquid biopsy technology, and AgeX (NYSE American: AGE) is focused on the development of early-stage programs relating to cell immortality, regenerative biology, aging, and age-related diseases.

Critical Accounting Policies

This Management’s Discussion and Analysis of Financial Condition and Results of Operations discusses and analyzes data in our unaudited Condensed Consolidated Interim Financial Statements, which we have prepared in accordance with GAAP. Preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. Management bases its estimates on historical experience and on various other assumptions that it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Senior management has discussed the development, selection and disclosure of these estimates with the Audit Committee of our Board of Directors. Actual conditions may differ from our assumptions and actual results may differ from our 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. Management believes that there have been no significant changes during the three months ended March 31, 2019 to the items that we disclosed as our critical accounting policies and estimates in Management’s Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the year ended December 31, 2018, except as follows:

Leases

We account for leases in accordance with Accounting Standards Codification, (“ASC”) 842, *Leases*. We determine if an arrangement is a lease at inception. Leases are classified as either financing or operating, with classification affecting the pattern of expense recognition in the consolidated statements of operations. Under the available practical expedients for the adoption of ASC 842, we account for the lease and non-lease components as a single lease component. We recognize right-of-use (“ROU”) assets and lease liabilities for leases with terms greater than twelve months in the condensed consolidated balance sheet.

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

Operating leases are included as right-of-use assets in property and equipment, and ROU lease liabilities, current and long-term, in the condensed consolidated balance sheets. Financing leases are included in property and equipment, and in financing lease liabilities, current and long-term, in the condensed consolidated balance sheets.

Business Combinations

We account for business combinations, such as the Asterias Merger completed in March 2019, in accordance with ASC Topic 805, *Business Combinations*, which requires the purchase price to be measured at fair value. When the purchase consideration consists entirely of shares of our common stock, we calculate the purchase price by determining the fair value, as of the acquisition date, of shares issued in connection with the closing of the acquisition. We recognize estimated fair values of the tangible assets and intangible assets acquired, including in-process research and development (“IPR&D”), and liabilities assumed as of the acquisition date, and we record as goodwill any amount of the fair value of the tangible and intangible assets acquired and liabilities assumed in excess of the purchase price.

Goodwill and IPR&D

Goodwill is calculated as the difference between the acquisition date fair value of the consideration transferred and the values assigned to the assets acquired and liabilities assumed. Goodwill is not amortized but is tested for impairment at least annually, or more frequently if circumstances indicate potential impairment.

IPR&D assets are indefinite-lived intangible assets until the completion or abandonment of the associated research and development (“R&D”) efforts. Once the R&D efforts are completed or abandoned, the IPR&D will either be amortized over the asset life as a finite-lived intangible asset or be impaired, respectively, in accordance with ASC 350, *Intangibles – Goodwill and Other*. In accordance with ASC 350, goodwill and acquired IPR&D are determined to have indefinite lives and, therefore, are not amortized. Instead, they are tested for impairment at least annually and between annual tests if we become aware of an event or a change in circumstances that would indicate the asset may be impaired.

Results of Operations

Comparison of Three Months Ended March 31, 2019 and 2018

Revenues and Cost of Sales

The amounts in the table 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)
	2019	2018		
Grant revenue	\$ 749	\$ 326	\$ 423	130%
Royalties from product sales and license fees	86	136	(50)	(37%)
Subscription and advertisement revenues	-	239	(239)	(100%)
Sale of research products and services	93	-	93	100%
Total revenues	928	701	227	32%
Cost of sales	(68)	(109)	(41)	(38%)
Gross profit	\$ 860	\$ 592	\$ 268	45%

Our total revenues increased by \$0.2 million for the three months ended March 31, 2019 as compared to the same period in the prior year, primarily reflecting a \$0.4 million increase in grant revenues, offset by a \$0.2 million decrease in subscriptions and advertisement revenues.

Our grant revenues are generated primarily by Cell Cure from the IIA for the development of OpRegen[®] and from a Small Business Innovation Research grant from the National Institutes of Health for our vision restoration program (the “NIH grant”). The increase in our grant revenues for the three months ended March 31, 2019 as compared to the same period in the prior year, was primarily due to timing of grant payments. Grant revenues generated by Cell Cure from the IIA for the development of OpRegen[®] amounted to \$0.4 million for the three months ended March 31, 2019, and grant revenues generated by the NIH grant amounted to \$0.3 million for the three months ended March 31, 2019, respectively.

Our subscription and advertising revenues, including certain service revenues, were generated entirely by LifeMap Sciences, AgeX’s majority-owned subsidiary and are included in our revenues prior to the AgeX Deconsolidation. As a result, the decrease in those revenues is due to the AgeX Deconsolidation on August 30, 2018. Due to the AgeX Deconsolidation, we do not expect to earn subscription and advertising revenues in future periods.

Revenues from the sale of research products and services are primarily derived from service revenues and the sale of hydrogels and stem cell products.

Cost of sales decreased for the three months ended March 31, 2019 primarily due to a net decrease in subscription and advertisement revenues and the sale of hydrogels and stem cell products.

Operating expenses

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)
	2019	2018		
Research and development expenses	\$ 4,961	\$ 5,935	\$ (974)	(16%)
Acquired in-process research and development	-	800	(800)	(100%)
General and administrative expenses	8,660	6,044	2,616	43%

Research and development expenses

The following tables show the amount of our total research and development expenses allocated to our primary research and development projects, by respective entity conducting the research and development, during the three months ended March 31, 2019 and 2018 (in thousands).

Company	Program	Three Months Ended March 31, (unaudited)			
		Amount ⁽¹⁾		Percent of Total	
		2019	2018	2019	2018
BioTime and subsidiaries other than AgeX ⁽²⁾	OpRegen [®] , OPC1, VAC2, Renevia [®] and other HyStem [®] products, and PureStem [®] progenitor cell lines for orthopedic applications	\$ 4,961	\$ 4,344	100%	65%
AgeX including ReCyte ⁽³⁾	PureStem [®] progenitor cell lines, brown adipose fat, iTR technology, and pre-clinical cardiovascular therapy research and development	-	1,212	0%	18%
AgeX ⁽⁴⁾	Acquired in-process research and development	-	800	0%	12%
LifeMap Sciences ⁽⁵⁾	Biomedical, gene, and disease databases and tools	-	379	0%	5%
Total research and development expenses		\$ 4,961	\$ 6,735	100%	100%

(1) Amount includes research and development expenses incurred directly by BioTime or the named entity and certain general research and development expenses, such as lab supplies, lab expenses, rent and insurance allocated to research and development expenses, incurred directly by BioTime on behalf of the subsidiary and allocated to the subsidiary.

(2) BioTime includes Cell Cure, ESI, and OrthoCyte.

(3) AgeX was capitalized during August 2017 by the contribution of assets from BioTime and cash from outside investors. Research and development expenses shown for the periods presented in 2018 are prior to the AgeX Deconsolidation.

(4) On March 23, 2018, AgeX purchased certain in-process research and development assets, primarily related to stem cell derived cardiomyocytes (heart muscle cells) to be developed by AgeX, for a total cash consideration of \$800,000. The transaction was considered an asset acquisition rather than a business combination. Accordingly, the \$800,000 was expensed on the acquisition date as acquired in-process research and development as those assets have no alternative future use.

(5) LifeMap Sciences is a subsidiary of AgeX. Research and development expenses shown for the periods presented in 2018 are prior to the AgeX Deconsolidation.

The decrease of \$1.8 million in total research and development expenses for the three months ended March 31, 2019 as compared to the same period in the prior year is mainly attributable to the following: decreases of \$1.6 million in AgeX related programs, including LifeMap Sciences, due to the AgeX Deconsolidation on August 30, 2018, and \$0.8 million related to the absence of a nonrecurring \$0.8 million expense incurred by AgeX on March 23, 2018 with respect to certain acquired in-process research and development assets that have no alternative future uses, offset by a net increase of \$0.6 million in BioTime programs primarily related to: (1) an increase of \$0.8 million in OpRegen related expenses, (2) an increase of \$0.6 million in OPC1 and VAC2 expenses (these programs were acquired in the Asterias Merger), offset by (3) decreases of \$0.8 million in Renevia and HyStem related expenses.

General and administrative expenses

The following table shows the amount of general and administrative expenses of BioTime and named subsidiaries during the three months ended March 31, 2019 and 2018 (in thousands):

Company	Three Months Ended March 31, (unaudited)			
	Amount ⁽¹⁾		Percent of Total	
	2019	2018	2019	2018
BioTime and subsidiaries other than AgeX ⁽²⁾	\$ 8,660	\$ 4,756	100%	79%
AgeX including ReCyte ⁽³⁾	-	1,082	0%	18%
LifeMap Sciences ⁽⁴⁾	-	208	0%	3%
LifeMap Solutions, Inc. ⁽⁵⁾	-	(2)	0%	0%
Total general and administrative expenses	\$ 8,660	\$ 6,044	100%	100%

(1) Amount includes general and administrative expenses incurred directly by the named subsidiary and allocations from BioTime for certain general overhead expenses to the subsidiary.

(2) BioTime includes Cell Cure, ESI, and OrthoCyte.

(3) AgeX was capitalized during August 2017 by the contribution of assets from BioTime and cash from outside investors. General and administrative expenses shown for the periods presented in 2018 are prior to the AgeX Deconsolidation.

(4) LifeMap Sciences is a subsidiary of AgeX. General and administrative expenses shown for the periods presented in 2018 are prior to the AgeX Deconsolidation.

(5) During July 2017, LifeMap Solutions ceased conducting its mobile health software application business and was dissolved on February 9, 2018.

The total net increase of \$2.6 million in general and administrative expense for the three months ended March 31, 2019 compared to the three months ended March 31, 2018, was primarily attributable to a \$3.5 million increase in severance, legal, accounting and other expenses related to the Asterias Merger and a \$0.5 million increase in stock-based compensation expenses due to new equity awards granted in 2019; both offset by a \$1.3 million decrease in AgeX related general and administrative expenses.

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

Other income and expenses, net

The following table shows the amount of other income and expenses, net, during the three months ended March 31, 2019 and 2018 (in thousands):

	Three Months Ended March 31, (unaudited)	
	2019	2018
Other income and expenses, net		
Interest income, net	\$ 442	\$ 52
Gain on sale of equity method investment in Ascendance	-	3,215
Gain (loss) on equity method investment in OncoCyte at fair value	37,713	(37,419)
Gain (loss) on equity method investment in Asterias at fair value	6,744	(17,398)
Unrealized gain on marketable equity securities	1,931	215
Unrealized gain on warrant liability	37	-
Other income (expense), net	806	(176)
Total other income (expense), net	\$ 47,673	\$ (51,511)

Gain (loss) on equity method investment in OncoCyte – We own 14.7 million shares of common stock of OncoCyte. We elected to account for our shares in OncoCyte at fair value using the equity method of accounting beginning on February 17, 2017, the date of the OncoCyte Deconsolidation. Our OncoCyte shares had a fair value of \$58.0 million and \$20.3 million as of March 31, 2019 and December 31, 2018, respectively, based on the closing price of OncoCyte common stock on the NYSE American of \$3.95 per share and \$1.38 per share, respectively, on those dates. Accordingly, we recorded an unrealized gain of \$37.7 million for the three months ended March 31, 2019. Our OncoCyte shares had a fair value of \$30.8 million and \$68.2 million as of March 31, 2018 and December 31, 2017, respectively, based on the closing price of OncoCyte common stock on the NYSE American of \$2.10 per share and \$4.65 per share, respectively, on those dates. Accordingly, we recorded an unrealized loss of \$37.4 million for the three months ended March 31, 2018.

Gain (loss) on equity method investment in Asterias shares – Prior to the closing of the Asterias Merger on March 8, 2019, where we acquired 100% of its outstanding shares, we owned 21.7 million shares of common stock of Asterias. We elected to account for our shares in Asterias at fair value using the equity method of accounting beginning on May 13, 2016, the date of the Asterias Deconsolidation. The fair value of our Asterias shares was approximately \$20.2 million as of March 8, 2019, the closing date of the Asterias Merger, based on \$0.93 per share, which was calculated by multiplying (a) \$1.31, the closing price of our common stock on such date by (b) the Merger Exchange Ratio. The fair value of our Asterias shares was approximately \$13.5 million as of December 31, 2018, based on the closing price of Asterias common stock of \$0.62 per share on such date. Accordingly, we recorded an unrealized gain of \$6.7 million for the three months ended March 31, 2019, representing the change in fair value of Asterias common stock from December 31, 2018 to March

8, 2019. For the three months ended March 31, 2018, we recorded an unrealized loss of \$17.4 million on the Asterias shares due to the decrease in Asterias' stock price from December 31, 2017 to March 31, 2018 from \$2.25 per share to \$1.45 per share.

We expect our other income and expenses, net, to continue to fluctuate each reporting period based on the changes in the market price of our OncoCyte shares, which could significantly impact our net income or loss reported in our condensed consolidated statements of operations for each period.

Marketable equity securities – We account for the shares we hold in foreign equity securities as marketable equity securities, carried at fair market value on our consolidated balance sheets. Beginning on January 1, 2018, in accordance with our adoption of ASU 2016-01, all gains and losses we generate each period due to changes in fair market value, including changes in foreign currency exchange rates, from these securities are included in other income and expenses, net, in our condensed consolidated statements of operations. For the three months ended March 31, 2019, we recorded an unrealized gain of \$1.9 million, due to the increase in fair market value of the marketable equity securities from December 31, 2018 to March 31, 2019.

Gain on sale of equity method investment in Ascendance – On March 23, 2018, Ascendance, AgeX’s equity method investee and BioTime’s former equity method investee, was acquired by a third party in a merger. AgeX received \$3.2 million in cash for its Ascendance common stock from which we recognized a gain on sale for the same amount during the three months ended March 31, 2018.

Other income (expense), net, interest income, net – Other income and expenses, net, in 2019 and 2018 consist primarily of net foreign currency transaction gains and losses recognized by Cell Cure and ESI, changes in the fair value of the Cell Cure Warrants, and interest income, net. Foreign currency transaction gains and losses for the periods presented are principally related to the remeasurement of the US dollar denominated notes payable by Cell Cure to BioTime.

Income Taxes

For items that we cannot reliably estimate on an annual basis (principally unrealized gains or losses generated by changes in the market prices of the OncoCyte and AgeX shares of common stock we hold, and prior to March 8, 2019, Asterias shares we held), we use 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 we hold creates a deferred tax liability based on the closing prices of the shares, less our tax basis in the shares. The deferred tax liability generated by the OncoCyte shares that we hold as of March 31, 2019, 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 deferred tax liability is determined based on the closing prices of the OncoCyte shares as of March 31, 2019. Due to the inherent unpredictability of future prices of those shares, we cannot reliably estimate or project those deferred tax liabilities on an annual basis. Therefore, the deferred tax liability 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.

On March 23, 2018, Ascendance was acquired by a third party in a merger through which AgeX received approximately \$3.2 million in cash for its shares of Ascendance common stock. For financial reporting purposes, AgeX recognized a \$3.2 million gain as a sale of its equity method investment in Ascendance. The sale was a taxable transaction to AgeX generating a taxable gain of approximately \$2.2 million, for which we had sufficient losses from operations to offset the entire gain resulting in no income taxes due.

The Juvenescence Transaction was a taxable event for us that resulted in a gross taxable gain of approximately \$29.4 million, which was fully offset with available current year net operating losses (NOL) and NOL carryforwards, resulting in no net income taxes due. Although the AgeX Deconsolidation on August 30, 2018 was not a taxable transaction to us and did not result in a current tax payment obligation, the financial reporting gain on the AgeX Deconsolidation generated a deferred tax liability, primarily representing the difference between book and tax basis of AgeX common stock on the AgeX Deconsolidation date. We expect this deferred tax liability to be fully offset by a corresponding release of our valuation allowance on deferred tax assets, resulting in no income tax provision or benefit from the AgeX Deconsolidation. The deferred tax liabilities on our investments in OncoCyte and Asterias, combined with the estimated deferred tax liability generated by the fair value of our retained noncontrolling investment in AgeX, are considered to be sources of taxable income that will more likely than not result in the realization of its deferred tax assets to the extent of those deferred tax liabilities, thereby reducing the need for a valuation allowance.

The distribution of AgeX shares of common stock to our shareholders on November 28, 2018 was a taxable event for us that resulted in a gross taxable gain of approximately \$26.4 million, which we fully offset with available NOL Carryforwards, resulting in no income taxes due.

In connection with the Asterias Merger, a deferred tax liability of \$13.0 million was recorded as part of acquisition accounting. This liability is related to fair value adjustments for the assets and liabilities acquired in the Asterias Merger, principally consisting of IPR&D. This estimate of deferred taxes was determined based on the excess of the estimated fair values of the acquired assets and liabilities over the tax basis of the assets and liabilities acquired. The statutory tax rate was applied, as appropriate, to the adjustment based on the jurisdiction in which the adjustment is expected to occur. This estimate of deferred income tax liabilities is preliminary and is subject to change based upon our final determination of the fair value of assets acquired and liabilities assumed.

A valuation allowance is provided when it is more likely than not that some portion of the deferred tax assets will not be realized. For federal and state income tax purposes, as a result of the deconsolidation of AgeX, Asterias and OncoCyte and the deferred tax liabilities generated from the market values of AgeX, Asterias and OncoCyte shares from the respective deconsolidation dates, including the changes to those deferred tax liabilities due to changes in the Asterias and OncoCyte stock prices, our deferred tax assets exceeded our deferred tax liabilities as of December 31, 2018. As a result, we established a full valuation allowance as of December 31, 2018 due to the uncertainty of realizing future tax benefits from our net operating loss carryforwards and other deferred tax assets.

Because the IPR&D (prior to completion or abandonment of the R&D) is considered an indefinite-lived asset for accounting purposes, the fair value of the IPR&D on the acquisition date creates a deferred income tax liability in accordance with ASC 740. This DTL is computed using the fair value of the IPR&D assets on the acquisition date multiplied by our respective federal and state income tax rates. While this DTL would reverse on impairment or sale or commencement of amortization of the related intangible assets, those events are not anticipated under ASC 740 for purposes of predicting reversal of a temporary difference to support the realization of deferred tax assets, except for certain deferred tax assets and credit carryforwards that are also indefinite in nature as of the Asterias Merger date, which may be considered for reversal.

For the three months ended March 31, 2019, we reversed a portion of our valuation allowance. The partial reversal of the historical valuation allowance is related to our deferred tax assets and credit carryforwards and is due to the acquired taxable temporary differences, primarily consisting of the acquired IPR&D discussed Note 13 to condensed consolidated financial statements included elsewhere in this Report. ASC 740 allows for deferred tax assets and credit carryforwards that are both available and indefinite in nature to be used against similar deferred tax liabilities as a source of income to support the realization of those deferred tax assets and credit carryforwards. Any benefit recognized from such a reversal of the valuation allowance is recorded outside of the acquisition accounting. Accordingly, the \$4.4 million valuation allowance release and the corresponding tax benefit was primarily related to state research and development credits, including current year federal net operating losses generated for the three months ended March 31, 2019, both of which are available and indefinite in nature.

We did not record any provision or benefit for income taxes for the three months ended March 31, 2018 as we have a full valuation allowance for the period presented.

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 stock prices of OncoCyte and AgeX shares, from period to period and the related changes in those deferred tax liabilities and our deferred tax assets and other credits, including changes in the valuation allowance, for each period. We also expect that if we continue to generate deferred tax assets and other credits that are indefinite in nature, we may be able to release our valuation allowance with a corresponding tax benefit to the extent of our deferred tax liability which is also indefinite in nature, principally related to our acquired IPR&D.

Liquidity and Capital Resources

At March 31, 2019, we had \$27.1 million of cash, cash equivalents and marketable equity securities on hand. We also hold OncoCyte shares (which had a market value of \$58.0 million as of March 31, 2019 based on the closing price of OncoCyte common stock on that date) that we may use for liquidity, as necessary, and as market conditions allow. The market value may not represent the amount that could be realized in a sale of OncoCyte shares due to various market and regulatory factors, including trading volume or market depth factors and volume and manner of sale restrictions under Federal securities laws, prevailing market conditions and prices at the time of any sale, and subsequent sales of securities by the subsidiaries.

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 subsidiary, AgeX, payments from research grants, royalties from product sales and sales of research products and services. At March 31, 2019, we had an accumulated deficit of \$222.4 million, working capital of \$21.9 million and shareholders' equity of \$161.2 million. We evaluated the projected cash flows for BioTime and our subsidiaries, and we believe that our \$27.1 million in cash, cash equivalents and marketable equity securities at March 31, 2019, plus the value of our investment in OncoCyte, provide sufficient cash, cash equivalents, and liquidity to carry out our current planned operations through at least twelve months from the issuance date of our condensed consolidated interim financial statements included elsewhere in this Report. Although we have no plans to liquidate our investment in OncoCyte, if we need near term working capital or liquidity to supplement our cash and cash equivalents for our operations, we may sell some, or all, of our OncoCyte shares, as necessary.

On March 8, 2019, the Asterias Merger closed and Asterias became our wholly-owned subsidiary. We began consolidating Asterias' operations and results with our operations and results beginning on March 8, 2019. As we integrate Asterias' operations into our own, we expect to make extensive reductions in headcount and to reduce non-clinical related spend, in each case, as compared to Asterias' operations before the merger.

Our projected cash flows are subject to various risks and uncertainties, and the unavailability or inadequacy of financing to meet future capital needs could force us to modify, curtail, delay, or suspend some or all aspects of our current planned operations. Our determination as to when we will seek new financing and the amount of financing that we will need will be based on our evaluation of the progress we make in our research and development programs, any changes to the scope and focus of those programs, any changes in grant funding for certain of those programs, and projection of future costs, revenues, and rates of expenditure. We may be required to delay, postpone, or cancel our clinical trials or limit the number of clinical trial sites, unless we are able to obtain adequate financing. In addition, we have incurred and expect to continue incurring significant costs in connection with the acquisition of Asterias and with integrating its operations. We may incur additional costs to maintain employee morale and to retain key employees. We cannot assure that adequate financing will be available on favorable terms, if at all. Sales of additional equity securities by us or our subsidiaries and affiliates could result in the dilution of the interests of our current shareholders.

Cash flows used in operating activities

Net cash used in operating activities of \$9.3 million for the three months ended March 31, 2019 primarily reflects the loss from operations of \$12.8 million less the changes in operating assets and liabilities of \$0.8 million. These items were offset primarily by non-cash expenses of \$1.4 million for stock-based compensation and \$0.8 million of depreciation and amortization. The unrealized gains on equity method investments and marketable securities and deferred tax benefit are non-cash items that had no effect on cash flows.

Net cash used in operating activities of \$10.3 million for the three months ended March 31, 2018 primarily reflects the loss from operations of \$12.2 million plus the changes in assets and liabilities of \$0.9 million. These items were offset primarily by non-cash expenses of \$1.0 million for stock-based compensation and \$0.9 million of depreciation and amortization. The unrealized gains on equity method investments and marketable securities are non-cash items that had no effect on cash flows.

Cash flows provided by investing activities

Cash provided by investing activities of \$2.9 million for the three months ended March 31, 2019 was associated primarily with the receipt of \$3.1 million of cash that Asterias had on the closing date of the Asterias Merger, offset by \$0.2 million in purchases of equipment and other assets. Cash provided by investing activities of \$2.2 million for the three months ended March 31, 2018 was associated primarily with proceeds of \$3.2 million related to the sale of the equity method investment in Ascendance, offset by \$0.8 million for the purchase of in-process research and development and \$0.2 million in purchases of equipment and other assets.

Cash flows provided by financing activities

Cash provided by financing activities of \$0.6 million for the three months ended March 31, 2019 was associated primarily with \$0.7 million in landlord reimbursements for tenant improvements, offset by \$0.1 million in common shares received and retired for employee taxes paid. Cash provided by financing activities of \$0.6 million for the three months ended March 31, 2018 was associated primarily with \$0.7 million in proceeds from the sale of subsidiary warrants, offset by \$0.1 million for repayment of lease liability and capital lease obligation.

Off-Balance Sheet Arrangements

As of March 31, 2019, and December 31, 2018, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K.

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 Securities Exchange Act of 1934 ("Exchange Act"). Our management, including our principal executive officer and our principal financial officer, have reviewed and evaluated the effectiveness of our disclosure controls and procedures as of the end of 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

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.

On February 19, 2019, a putative class action lawsuit relating to the Asterias acquisition was filed on behalf of Asterias shareholders in the Superior Court of the State of California in the County of Alameda challenging the Asterias merger. On May 3, 2019, an amended class action complaint (the "Amended Complaint") was filed. The Amended Complaint names, among other parties, the members of Asterias' board of directors, BioTime, Neal Bradsher, Broadwood Capital, Inc. and Broadwood Partners, L.P. The Amended Complaint asserts claims for breach of fiduciary duty and aiding and abetting breach of fiduciary duty, alleging that the consideration Asterias shareholders are to receive in the merger is unfair, the merger is the product of an unfair process, and the joint proxy statement omits certain allegedly material information. The Amended Complaint seeks, among other things, that a class be certified, the recovery of monetary damages and an award of plaintiffs' expenses and attorneys' fees. The defendants specifically deny all allegations in the litigation, including that any additional disclosure was or is required and intend to defend it vigorously. To moot the disclosure claims in the complaint, Asterias and BioTime made supplemental disclosures to the joint proxy statement relating to the merger.

Item 1A. Risk Factors

Our business, financial condition, results of operations and future growth prospects are subject to various risks, including those described in Item 1A "Risk Factors" of our Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 14, 2019 (the "2018 Form 10-K"), which we encourage you to review. There have been no material changes from the risk factors disclosed in the 2018 Form 10-K.

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

None.

Item 6. Exhibits

Exhibit Numbers	Description
3.1	Restated Articles of Incorporation, as amended (1)
3.2	By-Laws, as amended (2)
10.1	Employment Agreement, dated January 7, 2019, between BioTime, Inc. and Brandi L. Roberts (3)
10.2*	Employment Agreement, dated March 18, 2019, between BioTime, Inc. and Edward D. Wirth, III
31.1*	Certification of Chief Executive Officer pursuant to Form of Rule 13a-14(a), as Adopted Pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002, dated May 9, 2019
31.2*	Certification of 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, dated May 9, 2019
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, dated May 9, 2019
101	Interactive Data Files
101.INS	XBRL Instance Document*
101.SCH	XBRL Taxonomy Extension Schema*
101.CAL	XBRL Taxonomy Extension Calculation Linkbase*
101.DEF	XBRL Taxonomy Extension Definition Document*
101.LAB	XBRL Taxonomy Extension Label Linkbase*
101.PRE	XBRL Taxonomy Extension Presentation Linkbase*

- (1) Incorporated by reference to BioTime's Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on May 10, 2018.
(2) Incorporated by reference to BioTime's Current Report on Form 8-K, filed with the Securities and Exchange Commission on September 7, 2017.
(3) Incorporated by reference to BioTime's Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 14, 2019.

* Filed 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.

BIOTIME, INC.

Date: May 9, 2019

/s/ Brian M. Culley

Brian M. Culley
Chief Executive Officer

Date: May 9, 2019

/s/ Brandi L. Roberts

Brandi L. Roberts
Chief Financial Officer

EMPLOYMENT AGREEMENT

EMPLOYMENT AGREEMENT (“Agreement”) is made March 18, 2019 (“Effective Date”), by and between BioTime, Inc. (the “Company” or “BioTime”), a California corporation, and Edward Wirth (“Executive”).

NOW, THEREFORE, in consideration of the terms and conditions hereinafter set forth, the parties hereto agree as follows:

1. Engagement; Position and Duties.

(a) Position and Duties. The Company agrees to employ Executive in the position of Chief Medical Officer to perform the duties as outlined on Exhibit 1 and as the Chief Executive Officer (CEO) or the Board of Directors of the Company (the “Board of Directors”) may from time to time direct or require. The position of Chief Medical Officer requires travel domestically and internationally and such travel could represent up to 30% of work time. Executive shall report to the Chief Executive Officer. Executive shall devote best efforts, skills and abilities, on a full-time basis, exclusively to the Company’s business. Executive covenants and agrees to faithfully adhere to and fulfill such policies as are established from time to time by the Board of Directors or the Company (“Policies”).

(b) Performance of Services for Related Companies. In addition to the performance of services for Company, Executive shall, to the extent so required by Company, also perform services for one or more members of a consolidated group of which Company is a part (“Related Company”), provided that such services are consistent with the kind of services Executive performs or may be required to perform for Company under this Agreement. If Executive performs any services for any Related Company, Executive shall not be entitled to receive any compensation or remuneration in addition to or in lieu of the compensation and remuneration provided under this Agreement on account of such services for the Related Company. The Policies will govern Executive’s employment by Company and any Related Companies for which Executive is asked to provide Services. In addition, Executive covenants and agrees that Executive will faithfully adhere to and fulfill such additional policies as may be established from time to time by the board of directors of any Related Company for which Executive performs services, to the extent that such policies and procedures differ from or are in addition to the Policies adopted by Company.

(c) No Conflicting Obligations. Executive represents and warrants to Company that Executive is under no obligations or commitments, whether contractual or otherwise, that are inconsistent with Executive’s obligations under this Agreement or that would prohibit Executive, contractually or otherwise, from performing Executive’s duties as under this Agreement and the Policies.

(d) No Unauthorized Use of Third Party Intellectual Property. Executive represents and warrants to Company that Executive will not use or disclose, in connection with Executive's employment by Company or any Related Company, any patents, trade secrets, confidential information, or other proprietary information or intellectual property as to which any other person has any right, title or interest, except to the extent that Company or a Related Company holds a valid license or other written permission for such use from the owner(s) thereof. Executive represents and warrants to Company that Executive has returned all property and confidential information belonging to any prior employer.

2. Compensation

(a) Salary. During the term of this Agreement, Company shall pay to the Executive a salary of \$380,000.00 annually. Executive's salary shall be paid in equal semi-monthly installments, consistent with Company's regular salary payment practices. Executive's salary may be increased from time-to-time by Company, in Company's sole and absolute discretion, without affecting this Agreement.

(b) Bonus. Executive may be eligible for an annual bonus of up to 35% of Executive's annual salary, as may be approved by the Board of Directors in its discretion, based on Executive's achievement of predetermined Company and individual objectives set by the Board of Directors, or the Compensation Committee of the Board of Directors, from time to time. Executive also agrees that the Board of Directors and Company are not obligated to adopt any bonus plan, to maintain in effect any bonus plan that may now be in effect or that may be adopted during the term of Executive's employment, or to pay Executive a bonus unless a bonus is earned under the terms and conditions of any bonus plan adopted by Company.

(c) Equity. The Company will recommend to the Board of Directors that Executive be granted an option to purchase 350,000 shares of the Company's Common stock (the "Option"). Grant of the Option is subject to the approval of the Board of Directors. If granted, the shares subject to the Option shall vest over four years of continuous service to the Company, with twenty-five percent (25%) of the shares subject to the Option grant becoming vested on the first year anniversary of the Start Date, and the remaining shares becoming vested in equal monthly installments over the following thirty-six (36) months of continuous service. The exercise price of the Option, as well as other matters related to the Option, will be governed by and subject to the terms and conditions set forth in the Asterias 2013 Equity Incentive Plan and the stock option agreement Executive will be required to execute.

(d) Expense Reimbursements. Company or a Related Company shall reimburse Executive for reasonable travel and other business expenses (but not expenses of commuting to a primary workplace) incurred by Executive in the performance of Executive's duties under this Agreement, subject to the Policies and procedures in effect from time to time, and provided that Executive submits supporting vouchers. Company will additionally reimburse the travel costs (including airfare and transfer to/from airport) for Executive's round-trip travel between Alameda and San Diego not more often than once each week, in accordance with Company's employee travel policies, for a period not to exceed 12 months after the Effective Date.

(e) Benefit Plans. Executive may be eligible (to the extent Executive qualifies) to participate in certain retirement, pension, life, health, accident and disability insurance, equity incentive plan or other similar employee benefit plans, which may be adopted by Company for its executive officers or other employees. Company and the Related Companies have the right, at any time and without any amendment of this Agreement, and without prior notice to or consent from Executive, to adopt, amend, change, or terminate any such benefit plans that may now be in effect or that may be adopted in the future, in each case without any further financial obligation to Executive; provided that such unilateral change does apply to Executive in a manner different than other Company executives or employees of a comparable executive level, except for changes required by applicable federal, state, or local law, or implemented in response to any change of federal, state or local law or regulation. Any benefits to which Executive may be entitled under any benefit plan shall be governed by the terms and conditions of the applicable benefit plan, and any related plan documents, as in effect from time to time. If Executive receives any grant of stock options or stock or stock related equity awards (“Awards”) under any stock option plan, stock purchase plan, or other equity incentive plan of Company (an “Equity Plan”), the terms and conditions of the Award, and Executive’s rights with respect to the Award, shall be governed by (i) the terms of the Equity Plan, as the same may be amended from time to time, and (ii) the terms and conditions of any stock option agreement, stock purchase agreement, or other agreement that Executive may sign or be required to sign with respect to any Award.

(f) Vacation; Sick Leave. Executive shall be entitled to 20 paid time off days (accrued on a biweekly pay period basis and capped at 1.5 times the yearly accrual), 24 hours of annual sick leave, without reduction in compensation, during each calendar year, or as may be provided by the Policies. Executive shall also receive the benefit of 114.75 PTO hours of Asterias Biotherapeutics, Inc., which Executive has elected to roll over to the Company. Executive’s vacation shall be taken at such time as is consistent with the needs and Policies of Company and its Related Companies. All vacation days and sick leave days shall accrue annually based upon days of service. Executive’s right to leave from work due to illness is subject to the Policies and the provisions of this Agreement governing termination due to disability, sickness or illness. The Policies governing the disposition of unused vacation days and sick leave days remaining at the end of Company’s fiscal year shall govern whether unused vacation days or sick leave days will be paid, lost, or carried over into subsequent fiscal years.

3. Competitive Activities. During the term of Executive’s employment, and for twenty-four months thereafter, Executive shall not, for Executive or any third party, directly or indirectly employ, solicit for employment or recommend for employment any person employed by Company or any Related Company. During the term of Executive’s employment, Executive shall not, directly or indirectly as an employee, contractor, officer, director, member, partner, agent, or equity owner, engage in any activity or business that competes or could reasonably be expected to compete with the business of Company or any Related Company. Executive acknowledges that there is a substantial likelihood that the activities described in this Section would (a) involve the unauthorized use or disclosure of Company’s or a Related Company’s Confidential Information and that use or disclosure would be extremely difficult to detect, and (b) result in substantial competitive harm to the business of Company or a Related Company. Executive has accepted the limitations of this Section as a reasonably practicable and unrestrictive means of preventing such use or disclosure of Confidential Information and preventing such competitive harm.

4. Inventions/Intellectual Property/Confidential Information. Employee acknowledges the execution and delivery to Company of an Employee Confidential Information and Inventions Assignment Agreement” (the “Confidentiality and IP Agreement”), attached hereto as **Exhibit 2**.

5. Termination of Employment. Executive understands and agrees that Executive’s employment has no specific term. This Agreement, and the employment relationship, are “at will” and may be terminated by Executive or by Company (and the employment of Executive by any Related Company by be terminated by the Related Company) with or without cause at any time by notice given orally or in writing. Except as otherwise agreed in writing or as otherwise provided in this Agreement, upon termination of Executive’s employment, Company and the Related Companies shall have no further obligation to Executive, by way of compensation or otherwise, as expressly provided in this Agreement or in any separate employment agreement that might then exist between Executive and a Related Company.

(a) Payments Due Upon Termination of Employment. Upon termination of Executive’s employment with Company at any time and for any reason, in the event of the termination of Executive’s employment by Company for Cause, or termination of Executive’s employment as a result of death, Disability, or resignation, Executive will be entitled to receive only the severance benefits set forth below, and Executive will not be entitled to any other compensation, award, or damages with respect to Executive’s employment or termination of employment.

(i) Termination for Cause, Death, Disability, or Resignation. In the event of the termination of Executive’s employment by Company for Cause, or termination of Executive’s employment as a result of death, Disability, or resignation, Executive will be entitled to receive payment for all accrued but unpaid salary actually earned prior to or as of the date of termination of Executive’s employment, and vacation or paid time off accrued as of the date of termination of Executive’s employment. Executive will not be entitled to any cash severance benefits or additional vesting of any stock options or other equity or cash awards.

(ii) Termination Without Cause. In the event of termination of Executive’s employment by Company without Cause, Executive will be entitled to (A) the benefits set forth in paragraph (a)(i) of this Section; and (B) (1) six (6) months’ base salary if terminated within the first twelve (12) months of employment, or (2) nine (9) months’ base salary if terminated after twelve (12) months of employment, either of which may be paid in a lump sum or, at the election of BioTime, in installments consistent with the payment of Employee’s salary while employed by BioTime, subject to such payroll deductions and withholdings as are required by law. This paragraph shall not apply to (x) termination of Executive’s employment by a Related Company if Executive remains employed by Company, or (y) termination of Executive’s employment by Company if Executive remains employed by a Related Company.

(iii) Change of Control. If Company (or any successor in interest to Company that has assumed Company's obligation under this Agreement) terminates Executive's employment without Cause or Executive resigns for Good Reason within twelve (12) months following a Change in Control, Executive will be entitled to (A) the benefits set forth in paragraph (a)(i) and (a)(ii) of this Section, and (B) fifty percent of any then unvested options, restricted stock or restricted stock units as may have been granted to Employee by BioTime if termination of employment occurs during the first year of Employee's employment by BioTime, or accelerated vesting of one hundred percent (100%) of any then unvested options, restricted stock or restricted stock units as may have been granted to Employee by BioTime if termination of employment occurs after the first year of Employee's employment by BioTime. This paragraph shall not apply to (x) termination of Executive's employment by a Related Company if Executive remains employed by Company or a successor in interest, or (y) termination of Executive's employment by Company or a successor in interest if Executive remains employed by a Related Company.

(b) Release. The Company's obligation to make such payments under paragraphs (a)(ii) and (a)(iii) of this Section and provide any other such benefits contemplated herein shall be contingent upon:

(i) Executive's execution of a release in a form reasonably acceptable to the Company (the "Release"), which Release must be signed and any applicable revocation period with respect thereto must have expired by the 30th day following Executive's termination of employment. The Release will not waive any of Executive's rights, or obligations of the Company or its successor in interest and the Related Companies, regarding: (1) any right to indemnification and/or contribution, advancement or payment of related expenses Executive may have pursuant to the Company's Bylaws, Articles of Incorporation, under any written indemnification or other agreement between the parties, and/or under applicable law; (2) any rights that Executive may have to insurance coverage under any directors and officers liability insurance, other insurance policies of the Company, COBRA or any similar state law; (3) any claims for worker's compensation, state disability or unemployment insurance benefits, or any other claims that cannot be released as a matter of applicable law; (4) rights to any vested benefits under any stock, compensation or other employee benefit plan of the Company; (5) any rights Executive may have as an existing shareholder of the Company; and (6) any claims arising after the effective date of the Release. Nothing in the Release or any other agreement between Executive and the Company will prohibit or prevent Executive from providing truthful testimony or otherwise responding accurately and fully to any question, inquiry or request for information or documents when required by legal process, subpoena, notice, court order or law (including, without limitation, in any criminal, civil, or regulatory proceeding or investigation), or as necessary in any action for enforcement or claimed breach of this Agreement or any other legal dispute with the Company. If the Release has been signed and any applicable revocation period has expired prior to the 30th day following Executive's termination of employment, then the severance payments above may be made on such earlier date; provided, however, that if the 30th day following Executive's termination of employment occurs in the calendar year following the year of Executive's termination date, then the payments shall not be made earlier than January 1 of such subsequent calendar year; and

(ii) Executive's tendering a written resignation as a director, if serving as a director of BioTime or any Related Company, as provided in Section 7.

(c) Section 280G of the Code.

(i) Notwithstanding anything in this Agreement to the contrary, if any payment, distribution, or other benefit provided by the Company to or for the benefit of Executive, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise (collectively, the "Payments"), (x) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (y) but for this Section 5(c) would be subject to the excise tax imposed by Section 4999 of the Code or any similar or successor provision thereto (the "Excise Tax"), then the Payments shall be either: (A) delivered in full pursuant to the terms of this Agreement, or (B) delivered to such lesser extent as would result in no portion of the payment being subject to the Excise Tax, as determined in accordance with Section 5(b).

(ii) The determination of whether Section 5(c)(i)(A) or Section 5(c)(i)(B) shall be given effect shall be made by the Company on the basis of which of such clauses results in the receipt by Executive of the greater Net After-Tax Receipt (as defined herein) of the aggregate Payments. The term "Net After-Tax Receipt" shall mean the present value (as determined in accordance with Section 280G of the Code) of the payments net of all applicable federal, state and local income, employment, and other applicable taxes and the Excise Tax.

(iii) If Section 5(c)(i)(B) is given effect, the reduction shall be accomplished in accordance with Section 409A of the Code and the following: first by reducing, on a pro rata basis, cash Payments that are exempt from Section 409A of the Code; second by reducing, on a pro rata basis, other cash Payments; and third by forfeiting any equity-based awards that vest and become payable, starting with the most recent equity-based awards that vest, to the extent necessary to accomplish such reduction.

(iv) Unless the Company and Executive otherwise agree in writing, any determination required under this Section 5(c) shall be made by the Company's independent accountants or compensation consultants (the "Third Party"), and all such determinations shall be conclusive, final and binding on the parties hereto. The Company and Executive shall furnish to the Third Party such information and documents as the Third Party may reasonably request in order to make a determination under this Section 5(c). The Company shall bear all fees and costs of the Third Party with respect to all determinations under or contemplated by this Section 5(c).

(d) Definitions. For purposes of this Section, the following definitions shall apply:

(i) "Affiliated Group" means (A) a Person and one or more other Persons in control of, controlled by, or under common control with such Person; and (B) two or more Persons who, by written agreement among them, act in concert to acquire Voting Securities entitling them to elect a majority of the directors of Company.

(ii) "Cause" shall mean a termination of Executive's employment based upon a finding by a majority of the Board of Directors of the Company or its successor, acting in good faith and based on its reasonable belief at the time, that Executive (a) has refused to perform the explicitly stated or reasonably assigned, lawful, and material duties required by Executive's position (other than by reason of a disability or analogous condition); (b) has committed or engaged in a material act of theft, embezzlement, dishonesty or fraud, a breach of confidentiality, an unauthorized disclosure or use of inside information, customer lists, trade secrets or other confidential information; (c) has breached a material fiduciary duty, or willfully and materially violated any other duty, law, rule, or regulation relating to the performance of Executive's duties to the Company or material policy of the Company or its successor; (d) has been convicted of, or pled guilty or nolo contendere to, misdemeanor involving moral turpitude or a felony; (e) has willfully and materially breached any of the provisions of any agreement with the Company or its successor which causes material injury to the Company; (f) has willfully engaged in unfair competition with, or otherwise acted intentionally in a manner materially injurious to the reputation, business or assets of, the Company or its successor; or (g) has improperly induced a vendor or customer to break or terminate any material contract with the Company or its successor or induced a principal for whom the Company or its successor acts as agent to terminate such agency relationship. "Cause" shall only exist if the Company first provides Executive with written notice of any claimed ground for Cause and an opportunity to cure such ground, if curable, for thirty (30) days. For purposes of this Agreement, no act or failure to act on Executive's part will be considered "willful" unless it is done, or omitted to be done, by Executive intentionally, not in good faith or without reasonable belief that the action or omission was in the best interest of the Company.

(iii) "Change of Control" means (A) the acquisition of Voting Securities of Company by a Person or an Affiliated Group entitling the holder thereof to elect a majority of the directors of Company; provided, that an increase in the amount of Voting Securities held by a Person or Affiliated Group who on the date of this Agreement owned beneficially owned (as defined in Section 13(d) of the Securities Exchange Act of 1934, as amended, and the regulations thereunder) more than 10% of the Voting Securities shall not constitute a Change of Control; and provided, further, that an acquisition of Voting Securities by one or more Persons acting as an underwriter in connection with a sale or distribution of such Voting Securities shall not constitute a Change of Control under this clause (A); (B) the sale of all or substantially all of the assets of Company; or (C) a merger or consolidation of Company with or into another corporation or entity in which the stockholders of Company immediately before such merger or consolidation do not own, in the aggregate, Voting Securities of the surviving corporation or entity (or the ultimate parent of the surviving corporation or entity) entitling them, in the aggregate (and without regard to whether they constitute an Affiliated Group) to elect a majority of the directors or persons holding similar powers of the surviving corporation or entity (or the ultimate parent of the surviving corporation or entity); provided, however, that in no event shall any transaction described in clauses (A), (B) or (C) be a Change of Control if all of the Persons acquiring Voting Securities or assets of Company or merging or consolidating with Company are one or more Related Companies.

(iv) "Disability" shall mean Executive's inability to perform the essential functions of Executive's job responsibilities for a period of one hundred eighty (180) days in the aggregate in any twelve (12) month period.

(v) "Good Reason" shall mean the occurrence of any of the following events or circumstances without Executive's written consent: (i) a material diminution in Executive's base compensation; (ii) a material diminution in Executive's authority, duties or responsibility; (iii) a material change in the principal geographic location at which Executive performs services; (iv) any requirement that Executive engage in any illegal conduct; (v) a material breach by the Company of this Agreement or any other material written agreement between Executive and the Company; or (vi) Executive's primary role being moved to a Related Company, unless Executive reasonably agrees to the move of the primary role, which agreement shall not be unreasonably withheld.

(vi) "Person" means any natural person or any corporation, partnership, limited liability company, trust, unincorporated business association, or other entity.

(vii) "Voting Securities" means shares of capital stock or other equity securities entitling the holder thereof to regularly vote for the election of directors (or for person performing a similar function if the issuer is not a corporation), but does not include the power to vote upon the happening of some condition or event which has not yet occurred.

6. Turnover of Property and Documents on Termination. Executive agrees that on or before termination of Executive's employment, Executive will return to Company, and all Related Companies, all equipment and other property belonging to Company and the Related Companies, and all originals and copies of confidential information (in any and all media and formats, and including any document or other item containing confidential information) in Executive's possession or control, and all of the following (in any and all media and formats, and whether or not constituting or containing confidential information) in Executive's possession or control: (a) lists and sources of customers; (b) proposals or drafts of proposals for any research grant, research or development project or program, marketing plan, licensing arrangement, or other arrangement with any third party; (c) reports, notations of the Executive, laboratory notes, specifications, and drawings pertaining to the research, development, products, patents, and technology of Company and any Related Companies; (d) any and all intellectual property developed by Executive during the course of employment; and (e) the manual and memoranda related to the Policies. To the extent there is a conflict between this Section 6 and the Confidentiality and IP Agreement executed by the Executive, the Confidentiality and IP Agreement provisions control.

7. Resignation as a Director on Termination of Employment. If Executive's employment by Company is terminated for any reason or for no reason, whether by way of resignation, Disability, or termination by Company with or without Cause, and if Executive is then a member of the Board of Directors of Company or any Related Company, Executive shall within two business days after such termination of employment resign from the Board of Directors of Company and from the board of directors of each and every Related Company, by delivering to Company (and each Related Company, as applicable) a letter or other written communication addressed to the Board of Directors of Company (and each Related Company, as applicable) stating that Executive is resigning from the Board of Directors of Company (and each Related Company, as applicable) effective immediately. A business day shall be any day other than a Saturday, Sunday, or federal holiday on which federal offices are closed.

8. Arbitration. Except for injunctive proceedings against unauthorized disclosure of confidential information, any and all claims or controversies between Company or any Related Company and Executive, including but not limited to (a) those involving the construction or application of any of the terms, provisions, or conditions of this Agreement or the Policies; (b) all contract or tort claims of any kind; and (c) any claim based on any federal, state, or local law, statute, regulation, or ordinance, including claims for unlawful discrimination or harassment, shall be settled by arbitration in accordance with the then current Employment Dispute Resolution Rules of the American Arbitration Association. Judgment on the award rendered by the arbitrator(s) may be entered by any court having jurisdiction over Company and Executive. The location of the arbitration shall be San Francisco, California. Unless Company or a Related Company and Executive mutually agree otherwise, the arbitrator shall be a retired judge selected from a panel provided by the American Arbitration Association, or the Judicial Arbitration and Mediation Service (JAMS). Company, or a Related Company, if the Related Company is a party to the arbitration proceeding, shall pay the arbitrator's fees and costs. Executive shall pay for Executive's own costs and attorneys' fees, if any. Company and any Related Company that is a party to an arbitration proceeding shall pay for its own costs and attorneys' fees, if any. However, if any party prevails on a statutory claim which affords the prevailing party attorneys' fees, the arbitrator may award reasonable attorneys' fees and costs to the prevailing party.

EXECUTIVE UNDERSTANDS AND AGREES THAT THIS AGREEMENT TO ARBITRATE CONSTITUTES A WAIVER OF EXECUTIVE'S RIGHT TO A TRIAL BY JURY OF ANY MATTERS COVERED BY THIS AGREEMENT TO ARBITRATE.

9. Severability. In the event that any of the provisions of this Agreement or the Policies shall be held to be invalid or unenforceable in whole or in part, those provisions to the extent enforceable and all other provisions shall nevertheless continue to be valid and enforceable as though the invalid or unenforceable parts had not been included in this Agreement or the Policies. In the event that any provision relating to a time period of restriction shall be declared by a court of competent jurisdiction to exceed the maximum time period such court deems reasonable and enforceable, then the time period of restriction deemed reasonable and enforceable by the court shall become and shall thereafter be the maximum time period.

10. Agreement Read and Understood. Executive acknowledges that Executive has carefully read the terms of this Agreement, that Executive has had an opportunity to consult with an attorney or other representative of Executive's own choosing regarding this Agreement, that Executive understands the terms of this Agreement and that Executive is entering this Agreement of Executive's own free will.

11. Complete Agreement, Modification. This Agreement is the complete agreement between Executive and Company on the subjects contained in this Agreement. This Agreement supersedes and replaces all previous correspondence, promises, representations, and agreements, if any, either written or oral with respect to Executive's employment by Company or any Related Company and any matter covered by this Agreement. No provision of this Agreement may be modified, amended, or waived except by a written document signed both by Company and Executive.

12. Governing Law. This Agreement shall be construed and enforced according to the laws of the State of California.

13. Assignability. This Agreement, and the rights and obligations of Executive and Company under this Agreement, may not be assigned by Executive. Company may assign any of its rights and obligations under this Agreement to any successor or surviving corporation, limited liability company, or other entity resulting from a merger, consolidation, sale of assets, sale of stock, sale of membership interests, or other reorganization, upon condition that the assignee shall assume, either expressly or by operation of law, all of Company's obligations under this Agreement.

14. Survival. This Section 14 and the covenants and agreements contained in Sections 4 and 6 of this Agreement shall survive termination of this Agreement and Executive's employment.

15. Notices. Any notices or other communication required or permitted to be given under this Agreement shall be in writing and shall be mailed by certified mail, return receipt requested, or sent by next business day air courier service, or personally delivered to the party to whom it is to be given at the address of such party set forth on the signature page of this Agreement (or to such other address as the party shall have furnished in writing in accordance with the provisions of this Section 15).

[SIGNATURES TO THE EMPLOYMENT AGREEMENT ARE FOUND ON THE FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written.

EXECUTIVE:

/s/ Edward Wirth

Edward Wirth

Address:

COMPANY:

BIOTIME, INC.

By: */s/ Brian M. Culley*

Brian Michael Culley

Chief Executive Officer

BioTime, Inc.

1010 Atlantic Avenue, Suite 102

Alameda, California 94501

[SIGNATURE PAGE TO THE EMPLOYMENT AGREEMENT]

CERTIFICATIONS

I, Brian M. Culley, certify that:

1. I have reviewed this quarterly report on Form 10-Q of BioTime, Inc.
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this periodic report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 9, 2019

/s/ Brian M. Culley

Brian M. Culley
Chief Executive Officer

CERTIFICATIONS

I, Brandi Roberts, certify that:

1. I have reviewed this quarterly report on Form 10-Q of BioTime, Inc.
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this periodic report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 9, 2019

/s/ Brandi L. Roberts

Brandi L. Roberts
Chief Financial Officer

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

In connection with the Quarterly Report on Form 10-Q of BioTime, Inc. (the "Company") for the quarter ended March 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Brian M. Culley, Chief Executive Officer of the Company, and Brandi Roberts, 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 9, 2019

/s/ Brian M. Culley

Brian M. Culley
Chief Executive Officer

/s/ Brandi L. Roberts

Brandi L. Roberts
Chief Financial Officer
