

BIOTIME INC  
Form 10-Q  
May 10, 2012

---

FORM 10-Q

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

(Mark One)

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

For the quarterly period ended March 31, 2012

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.)

1301 Harbor Bay Parkway, Suite 100  
Alameda, California 94502  
(Address of principal executive offices)

(510) 521-3390  
(Registrant's telephone number, including area code)

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. TYes o No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted 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 and post such files). xYes o No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting

Edgar Filing: BIOTIME INC - Form 10-Q

company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="radio"/>	Accelerated filer	<input checked="" type="radio"/>
Non-accelerated filer	<input type="radio"/>	Smaller reporting company	<input type="radio"/>

(Do not check if a smaller reporting company)

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

**APPLICABLE ONLY TO CORPORATE ISSUERS:**

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date: 50,341,962 common shares, no par value, as of May 9, 2012.

---

---

---

## PART 1--FINANCIAL INFORMATION

Statements made in this Report that are not historical facts may constitute forward-looking statements that are subject to risks and uncertainties that could cause actual results to differ materially from those discussed. Such risks and uncertainties include but are not limited to those discussed in this report under Item 1 of the Notes to Financial Statements, and in BioTime's Annual Report on Form 10-K filed with the Securities and Exchange Commission. Words such as "expects," "may," "will," "anticipates," "intends," "plans," "believes," "seeks," "estimates," and similar identify forward-looking statements.

Item 1.

## Financial Statements

BIOTIME, INC.

## CONDENSED CONSOLIDATED BALANCE SHEETS

	March 31, 2012 (unaudited)	December 31, 2011
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	\$ 16,487,906	\$ 22,211,897
Inventory	54,866	51,174
Prepaid expenses and other current assets	2,101,905	2,692,303
Total current assets	18,644,677	24,955,374
Equipment, net	1,385,316	1,347,779
Deferred license and consulting fees	800,164	843,944
Deposits	63,963	63,082
Intangible assets, net	18,083,779	18,619,516
<b>TOTAL ASSETS</b>	<b>\$ 38,977,899</b>	<b>\$ 45,829,695</b>
<b>LIABILITIES AND EQUITY</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable and accrued liabilities	\$ 1,502,207	\$ 2,681,111
Deferred grant income	261,777	261,777
Deferred license revenue, current portion	201,545	203,767
Total current liabilities	1,965,529	3,146,655
<b>LONG-TERM LIABILITIES</b>		
Deferred license revenue, net of current portion	863,083	899,551
Deferred rent, net of current portion	62,822	66,688
Other long term liabilities	255,413	258,620
Total long-term liabilities	1,181,318	1,224,859
Commitments and contingencies		
<b>EQUITY</b>		
Preferred Shares, no par value, authorized 1,000,000 shares; none issued		
Common shares, no par value, authorized 75,000,000 shares; 50,321,962 issued, and 49,035,788 outstanding at March 31, 2012 and at December 31, 2011	115,547,532	115,144,787
Contributed capital	93,972	93,972

Edgar Filing: BIOTIME INC - Form 10-Q

Accumulated other comprehensive income	1,340	(122,749 )
Accumulated deficit	(85,443,351 )	(80,470,009 )
Treasury stock at cost: 1,286,174 shares at March 31, 2012 and at December 31, 2011	(6,000,000 )	(6,000,000 )
Total shareholders' equity	24,199,493	28,646,001
Noncontrolling interest	11,631,559	12,812,180
Total equity	35,831,052	41,458,181
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>\$ 38,977,899</b>	<b>\$45,829,695</b>

See accompanying notes to the condensed consolidated interim financial statements.

## BIOTIME, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS  
(Unaudited)

	Three Months Ended	
	March 31,	March 31, 2011
	2012	
<b>REVENUES:</b>		
License fees	\$ 36,468	\$ 104,599
Royalties from product sales	147,384	215,971
Grant income	400,809	415,611
Sale of research products	47,285	88,448
Total revenues	631,946	824,629
<b>EXPENSES:</b>		
Research and development	(4,178,781)	(2,948,861)
General and administrative	(2,368,705)	(1,901,655)
Total expenses	(6,547,486)	(4,850,516)
Loss from operations	(5,915,540)	(4,025,887)
<b>OTHER INCOME/(EXPENSES):</b>		
Interest income, net	8,298	13,190
Other income/(expense), net	(327,095)	68,012
Total other income/(expenses), net	(318,797)	81,202
NET LOSS	(6,234,337)	(3,944,685)
Less: Net loss attributable to the noncontrolling interest	1,260,995	582,553
NET LOSS ATTRIBUTABLE TO BIOTIME, INC.	(4,973,342)	(3,362,132)
Foreign currency translation gain/(loss)	124,089	(670,005)
TOTAL COMPREHENSIVE LOSS	\$ (4,849,253)	\$ (4,032,137)
BASIC AND DILUTED LOSS PER COMMON SHARE	\$ (0.10)	\$ (0.07)
<b>WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING:</b>		
BASIC AND DILUTED	50,321,962	48,306,505

See accompanying notes to the condensed consolidated interim financial statements.

BIOTIME, INC.  
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS  
(Unaudited)

	Three Months Ended	
	March 31,	March 31,2011
	2012	
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net loss attributable to BioTime, Inc.	\$ (4,973,342)	\$ (3,362,132)
Adjustments to reconcile net loss attributable to BioTime, Inc. to net cash used in operating activities:		
Depreciation expense	88,692	65,244
Amortization of intangible assets	535,737	456,152
Amortization of deferred license and royalty revenues	(38,691)	(65,661)
Amortization of deferred consulting fees	194,062	194,062
Amortization of deferred license fees	27,500	27,375
Amortization of deferred rent	362	29,745
Stock-based compensation	316,058	289,540
Options issued as independent director compensation	157,376	143,796
Write off of expired inventory	-	4,008
Reduction in receivables from the reversal of revenues	204,934	-
Net loss allocable to noncontrolling interest	(1,260,995)	(582,553)
Changes in operating assets and liabilities:		
Accounts receivable, net	3,484	(118,782)
Grant receivable	-	261,777
Inventory	(3,692)	9,110
Prepaid expenses and other current assets	116,290	(313,823)
Accounts payable and accrued liabilities	(1,074,946)	(367,200)
Other long-term liabilities	(9,763)	(5,563)
Deferred revenues		(22,534)
Net cash used in operating activities	(5,716,934)	(3,357,439)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Purchase of equipment	(116,603)	(295,785)
Payment of license fee	-	(1,500)
Cash paid, net of cash acquired for CTI assets	-	(246,850)
Cash acquired in connection with merger with Glycosan	-	5,908
Security deposit received	(526)	244
Net cash used in investing activities	(117,129)	(537,983)
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Proceeds from the exercise of stock options from employees	-	72,853
Proceeds from the exercise of stock options from director	-	14,828
Proceeds from the exercise of stock options from outside consultant	-	2,350
Proceeds from the exercise of warrants	-	386,300
Proceeds from sale of common shares of subsidiary	-	213,500
Cash provided by financing activities	-	689,831
Effect of exchange rate changes on cash and cash equivalents	110,072	17,646

NET CHANGE IN CASH AND CASH EQUIVALENTS:	(5,723,991)	(3,187,945)
Cash and cash equivalents at beginning of period	22,211,897	33,324,924
Cash and cash equivalents at end of period	\$ 16,487,906	\$ 30,136,979

## SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:

Cash paid during the period for interest	\$ 112	\$ 96
--	--------	-------

## SUPPLEMENTAL SCHEDULE OF NON-CASH FINANCING AND INVESTING ACTIVITIES:

Common shares issued in connection with the purchase of assets	\$ -	\$ 2,300,000
Common shares issued as part of merger	\$ -	\$ 2,600,000
Warrants issued as part of merger	\$ -	\$ 954,879

See accompanying notes to the condensed consolidated interim financial statements.

BIOTIME, INC.

NOTES TO THE CONDENSED CONSOLIDATED INTERIM FINANCIAL STATEMENTS  
(UNAUDITED)

1. Organization, Basis of Presentation, and Summary of Select Significant Accounting Policies

General— BioTime is a biotechnology company engaged in two areas of biomedical research and product development. BioTime has historically developed blood plasma volume expanders and related technology for use in surgery, emergency trauma treatment and other applications. BioTime's primary focus is in the field of regenerative medicine; specifically human embryonic stem (“hES”) cell and induced pluripotent stem (“iPS”) cell technology. Regenerative medicine refers to therapies based on stem cell technology that are designed to rebuild cell and tissue function lost due to degenerative disease or injury. hES and iPS cells provide a means of manufacturing every cell type in the human body and therefore show considerable promise for the development of a number of new therapeutic products. BioTime plans to develop stem cell products for research and therapeutic use through its subsidiaries. OncoCyte Corporation (“OncoCyte”) is developing products and technologies to diagnose and treat cancer. ES Cell International Pte. Ltd. (“ESI”), a Singapore private limited company, develops and sells hES products for research use. BioTime Asia, Limited (“BioTime Asia”), a Hong Kong company, sells products for research use and may develop therapies to treat cancer, neurological, and orthopedic diseases. OrthoCyte Corporation (“OrthoCyte”) is developing therapies to treat orthopedic disorders, diseases and injuries. ReCyte Therapeutics, Inc., formerly known as Embryome Sciences, Inc. (“ReCyte Therapeutics”), is developing therapies to treat vascular and blood diseases and disorders. Cell Cure Neurosciences Ltd. (“Cell Cure Neurosciences”), is an Israel-based biotechnology company focused on developing stem cell-based therapies for retinal and neurological disorders, including the development of retinal pigment epithelial cells for the treatment of macular degeneration, and treatments for multiple sclerosis. LifeMap Sciences, Inc. (“LifeMap”) is advancing the development and commercialization of BioTime’s embryonic stem cell database and plans to make the database available for use by stem cell researchers at pharmaceutical and biotechnology companies and other institutions through paid subscriptions or on a fee per use basis.

BioTime is focusing a portion of its efforts in the field of regenerative medicine on the development and sale of advanced human stem cell products and technology that can be used by researchers at universities and other institutions, at companies in the bioscience and biopharmaceutical industries, and at other companies that provide research products to companies in those industries. Products for the research market generally can be sold without regulatory (FDA) approval, and are therefore relatively near-term business opportunities when compared to therapeutic products.

BioTime’s operating revenues have been derived primarily from royalties and licensing fees related to the sale of its plasma volume expander product, Hextend®. BioTime began to make its first stem cell research products available during 2008, but has not yet generated significant revenues from the sale of those products. BioTime’s ability to generate substantial operating revenue in the near term depends upon its success in developing and marketing or licensing its plasma volume expanders and stem cell products and technology for medical and research use. On April 29, 2009, the California Institute of Regenerative Medicine (“CIRM”) awarded BioTime a \$4,721,706 grant for a stem cell research project related to its ACTCellerate™ technology. The CIRM grant covers the period of September 1, 2009 through August 31, 2012 and is paid in quarterly installments. BioTime received \$392,665 during the three months ended March 31, 2012 and in 2011. Grant revenues for the three months ended March 31, 2012 also include \$8,144 received by Cell Cure Neurosciences.

The unaudited condensed consolidated interim balance sheet as of March 31, 2012, the unaudited condensed consolidated interim statements of operations and comprehensive loss for the three months ended March 31, 2012 and 2011, and the unaudited condensed consolidated interim statements of cash flows for the three months ended March



31, 2012 and 2011 have been prepared by BioTime's management in accordance with the instructions from the Form 10-Q and Regulation S-X. In the opinion of management, all adjustments (consisting only of normal recurring adjustments) necessary to present fairly the financial position, results of operations, and cash flows at March 31, 2012 have been made. The condensed consolidated balance sheet as of December 31, 2011 is derived from the Company's annual audited financial statements as of that date. The results of operations for the three months ended March 31, 2012 are not necessarily indicative of the operating results anticipated for the full year of 2012.

Certain information and footnote disclosures normally included in consolidated financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted as permitted by regulations of the Securities and Exchange Commission (“SEC”) except for the condensed consolidated balance sheet as of December 31, 2011, which was derived from audited financial statements. Certain previously furnished amounts have been reclassified to conform with presentations made during the current periods. It is suggested that these condensed consolidated interim financial statements be read in conjunction with the annual audited condensed consolidated financial statements and notes thereto included in BioTime’s Form 10-K for the year ended December 31, 2011.

Principles of consolidation – BioTime’s condensed consolidated financial statements include the accounts of its subsidiaries. The following table reflects BioTime’s ownership of the outstanding shares of its subsidiaries.

Subsidiary	BioTime Ownership	Country
ReCyte Therapeutics, Inc. (formerly Embryome Sciences, Inc.)	95.15%	USA
OncoCyte Corporation	75.3%	USA
OrthoCyte Corporation	100%	USA
ES Cell International Pte., Ltd.	100%	Singapore
BioTime Asia, Limited	81%	Hong Kong
Cell Cure Neurosciences, Ltd.	53.6%	Israel
LifeMap Sciences, Inc.	100%	USA
LifeMap Sciences, Ltd.	100% (1)	Israel

(1) LifeMap Sciences, Ltd. is a wholly-owned subsidiary of LifeMap Sciences, Inc.

All material intercompany accounts and transactions have been eliminated in consolidation. As of March 31, 2012 and as of December 31, 2011, we consolidated ReCyte Therapeutics, OncoCyte, BioTime Asia, and Cell Cure Neurosciences as we have the ability to control their operating and financial decisions and policies through our ownership, and we reflect the noncontrolling interest as a separate element of equity on our condensed consolidated balance sheet.

Certain significant risks and uncertainties - BioTime’s operations are subject to a number of factors that can affect its operating results and financial condition. Such factors include but are not limited to, the following: the results of clinical trials of BioTime’s pharmaceutical products and medical devices; BioTime’s ability to obtain FDA and foreign regulatory approval to market its pharmaceutical and medical device products; BioTime’s ability to develop new stem cell research products and technologies; competition from products manufactured and sold or being developed by other companies; the price and demand for BioTime products; BioTime’s ability to obtain additional financing and the terms of any such financing that may be obtained; BioTime’s ability to negotiate favorable licensing or other manufacturing and marketing agreements for its products; the availability of ingredients used in BioTime’s products; and the availability of reimbursement for the cost of BioTime’s pharmaceutical products and medical devices (and related treatment) from government health administration authorities, private health coverage insurers, and other organizations.

Use of estimates – The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Revenue recognition – BioTime complies with SEC Staff Accounting Bulletin guidance on revenue recognition. Royalty and license fee revenues consist of product royalty payments and fees under license agreements

and are recognized when earned and reasonably estimable. BioTime recognizes revenue in the quarter in which the royalty reports are received, rather than the quarter in which the sales took place. When BioTime is entitled to receive up-front nonrefundable licensing or similar fees pursuant to agreements under which BioTime has no continuing performance obligations, the fees are recognized as revenues when collection is reasonably assured. When BioTime receives up-front nonrefundable licensing or similar fees pursuant to agreements under which BioTime does have continuing performance obligations, the fees are deferred and amortized ratably over the performance period. If the performance period cannot be reasonably estimated, BioTime amortizes nonrefundable fees over the life of the contract until such time that the performance period can be more reasonably estimated. Milestone payments, if any, related to scientific or technical achievements are recognized in income when the milestone is accomplished if (a) substantive effort was required to achieve the milestone, (b) the amount of the milestone payment appears reasonably commensurate with the effort expended, and (c) collection of the payment is reasonably assured. Grant income and the sale of research products are recognized as revenue when earned. Revenues from the sale of research products are primarily derived from the sale of hydrogels and stem cell products.

Cash and cash equivalents – BioTime considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents.

Accounts receivable and allowance for doubtful accounts - Trade accounts receivable and grants receivable are presented in the prepaid expenses and other current assets line item of the consolidated balance sheet. Total trade receivables amounted to \$150,000 and \$353,000 and grants receivable amounted to \$350,000 and \$630,000 as of March 31, 2012 and December 31, 2011, respectively. Some of these amounts are deemed uncollectible; as such BioTime recognized allowance for doubtful accounts in the amount of \$100,000 as of March 31, 2012 and December 31, 2011. BioTime evaluates the collectability of its receivables based on a variety of factors, including the length of time receivables are past due and significant one-time events and historical experience. An additional reserve for individual accounts will be recorded if BioTime becomes aware of a customer's inability to meet its financial obligations, such as in the case of bankruptcy filings or deterioration in the customer's operating results or financial position. If circumstances related to customers change, estimates of the recoverability of receivables would be further adjusted.

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

Equipment – Equipment is stated at cost. Equipment is being depreciated using the straight-line method over a period of 36 to 84 months. See Note 3.

Inventory – Inventories are stated at the lower of cost or market. Cost, which includes amounts related to materials, labor, and overhead, is determined in a manner which approximates the first-in, first-out (“FIFO”) method.

Treasury stock – BioTime accounts for BioTime common shares issued to subsidiaries for future potential working capital needs as treasury stock on the consolidated balance sheet. BioTime has the intent and ability to register any unregistered shares to support the marketability of the shares.

Patent costs – Costs associated with obtaining patents on products or technology developed are expensed as general and administrative expenses when incurred. This accounting is in compliance with guidance promulgated by the Financial Accounting Standards Board (the “FASB”) regarding goodwill and other intangible assets.

Reclassification – Certain prior year amounts have been reclassified to conform to the current year presentation.

Research and development – BioTime complies with FASB requirements governing accounting for research and development costs. Research and development costs are expensed when incurred, and consist principally of salaries, payroll taxes, consulting fees, research and laboratory fees, and license fees paid to acquire patents or licenses to use patents and other technology from third parties.

Foreign currency translation gain/(loss) and Comprehensive loss - In countries in which BioTime operates, and the functional currency is other than the U.S. dollar, assets and liabilities are translated using published exchange rates in effect at the consolidated balance sheet date. Revenues and expenses and cash flows are translated using an approximate weighted average exchange rate for the period. Resulting translation adjustments are recorded as a component of accumulated other comprehensive income on the consolidated balance sheet. For the three months ended March 31, 2012 and 2011, comprehensive loss includes gain and loss of \$124,089 and \$670,005, respectively which is entirely from foreign currency translation. For the three months ended March 31, 2012 and 2011, foreign currency transaction loss amounted to \$95,799 and \$80,492, respectively.

Income taxes – BioTime accounts for income taxes in accordance with the accounting principles generally accepted in the United States of America (“GAAP”) requirements, which prescribe the use of the asset and liability method, whereby deferred tax asset or liability account balances are calculated at the balance sheet date using current tax laws and rates in effect. Valuation allowances are established when necessary to reduce deferred tax assets when it is more likely than not that a portion or all of the deferred tax assets will not be realized. The FASB guidance also prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not sustainable upon examination by taxing authorities. BioTime recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense. No amounts were accrued for the payment of interest and penalties as of March 31, 2012 and December 31, 2011. Management is currently unaware of any tax issues under review.

Stock-based compensation – BioTime adopted accounting standards governing share-based payments, which require the measurement and recognition of compensation expense for all share-based payment awards made to directors and employees, including employee stock options, based on estimated fair values. In March 2005, the SEC issued additional guidelines which provide supplemental implementation guidance for valuation of share-based payments. BioTime has applied the provisions of this guidance in such valuations as well. Consistent with those guidelines, BioTime utilizes the Black-Scholes Merton option pricing model. BioTime's determination of fair value of share-based payment awards on the date of grant using that option-pricing model is affected by BioTime's stock price as well as by assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to, BioTime's expected stock price volatility over the term of the awards, and actual and projected employee stock option exercise behaviors. The expected term of options granted is derived from historical data on employee exercises and post-vesting employment termination behavior. The risk-free rate is based on the U.S. Treasury rates in effect during the corresponding period of grant. Although the fair value of employee stock options is determined in accordance with recent FASB guidance, changes in the subjective assumptions can materially affect the estimated value. In management's opinion, the existing valuation models, including Black-Scholes Merton, may not provide an accurate measure of the fair value of BioTime's employee stock options because the option-pricing model value may not be indicative of the fair value that would be established in a willing buyer/willing seller market transaction.

Impairment of long-lived assets – BioTime's long-lived assets, including intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be fully recoverable. If an impairment indicator is present, BioTime will evaluate recoverability by a comparison of the carrying amount of the assets to future undiscounted net cash flows expected to be generated by the assets. If the assets are impaired, the impairment will be recognized is measured by the amount by which the carrying amount exceeds the estimated fair value of the assets.

Deferred license and consulting fees – Deferred license and consulting fees consist of the value of warrants issued to third parties for services and to the minority shareholder in BioTime Asia for consulting services, and deferred license fees paid to acquire rights to use the proprietary technologies of third parties. The value of the warrants is being

amortized over the period the services are being provided, and the license fees are being amortized over the estimated useful lives of the licensed technologies or licensed research products. See Note 6.

Loss per share – Basic net loss per share is computed by dividing net loss attributable to BioTime, Inc. by the weighted-average number of common shares outstanding for the period. Diluted net loss per share reflects the weighted-average number of common shares outstanding plus the potential effect of dilutive securities or contracts which are convertible to common shares, such as options and warrants (using the treasury stock method) and shares issuable in future periods, except in cases where the effect would be anti-dilutive. Diluted loss per share for the three months ended March 31, 2012 and 2011 excludes any effect from 3,438,594 options and 636,613 warrants, and 3,173,273 options and 649,513 warrants, respectively, as the inclusion of those options and warrants would be antidilutive.

Fair value of financial instruments – The fair value of BioTime’s assets and liabilities, which qualify as financial instruments under FASB guidance regarding disclosures about fair value of financial instruments, approximate the carrying amounts presented in the accompanying consolidated balance sheets.

In June 2011, the FASB issued ASU No. 2011-05, Comprehensive Income (ASC Topic 220): Presentation of Comprehensive Income, (“ASU 2011-05”) which amends current comprehensive income guidance. This accounting update eliminates the option to present the components of other comprehensive income as part of the statement of shareholders’ equity. Instead, BioTime must report comprehensive income in either a single continuous statement of comprehensive income which contains two sections, net income and other comprehensive income, or in two separate but consecutive statements. ASU 2011-05 became effective for public companies during the interim and annual periods beginning after December 15, 2011 with early adoption permitted. BioTime does not believe that the adoption of ASU 2011-05 will have a material impact on its consolidated results of operation and financial condition.

## 2. Inventory

At March 31, 2012, BioTime, held \$40,916 of inventory of finished products on-site at its corporate headquarters in Alameda, California. At that same date \$13,950 of inventory of finished products was held by a third party on consignment. At December 31, 2011, BioTime held \$37,096 of inventory of finished products at its corporate headquarters and \$14,078 of inventory of finished products was held by a third party on consignment.

## 3. Equipment

At March 31, 2012 and December 31, 2011, equipment, furniture and fixtures were comprised of the following:

	March 31, 2012 (unaudited)	December 31, 2011
Equipment, furniture and fixtures	\$2,013,147	\$1,900,090
Accumulated depreciation	(627,831 )	(552,311 )
Equipment, net	\$1,385,316	\$1,347,779

Depreciation expense amounted to \$88,692 and \$65,244 for the three months ended March 31, 2012 and 2011, respectively. The difference between the depreciation expense recognized in the condensed consolidated statement of operations and the increase in accumulated depreciation of \$75,520 per the condensed consolidated balance sheet is partially attributed to the write off of \$21,148 of fully depreciated assets offset by foreign currency rates.

## 4. Intangible assets

At March 31, 2012 and December 31, 2011, intangible assets and intangible assets net of amortization were comprised of the following:

	March 31, 2012 (unaudited)	December 31, 2011
Intangible assets	\$21,429,488	\$21,429,488
Accumulated amortization	(3,345,709 )	(2,809,972 )
Intangible assets, net	\$18,083,779	\$18,619,516

BioTime amortizes its intangible assets over an estimated period of 10 years on a straight line basis. BioTime recognized \$535,737 and \$456,152 in amortization expense of intangible assets during the three months ended March 31, 2012 and 2011, respectively.

## 5. Accounts Payable and Accrued Liabilities

At March 31, 2012 and December 31, 2011, accounts payable and accrued liabilities consisted of the following:

	March 31, 2012 (unaudited)	December 31, 2011
Accounts payable	\$602,464	\$1,118,112
Accrued bonuses	-	583,620
Other accrued liabilities	899,743	979,379



\$1,502,207 \$2,681,111

## 6. Royalty Obligation and Deferred License Fees

BioTime amortizes deferred license fees over the estimated useful lives of the licensed technologies or licensed research products. BioTime is applying a 10 year estimated useful life to the technologies and products that it is currently licensing. The estimation of the useful life any technology or product involves a significant degree of inherent uncertainty, since the outcome of research and development or the commercial life a new product cannot be known with certainty at the time that the right to use the technology or product is acquired. BioTime will review its amortization schedules for impairments that might occur earlier than the original expected useful lives.

On January 3, 2008, BioTime entered into a Commercial License and Option Agreement with Wisconsin Alumni Research Foundation (“WARF”). The WARF license permits BioTime to use certain patented and patent pending technology belonging to WARF, as well as certain stem cell materials, for research and development purposes, and for the production and marketing of products used as research tools, including in drug discovery and development. BioTime or ReCyte Therapeutics will pay WARF royalties on the sale of products and services using the technology or stem cells licensed from WARF. The royalty will range from 2% to 4%, depending on the kind of products sold. The royalty rate is subject to certain reductions if BioTime also becomes obligated to pay royalties to a third party in order to sell a product. BioTime paid licensing fees, totaling \$295,000 in cash and BioTime stock, and reimbursed WARF for certain costs associated with preparing, filing, and maintaining the licensed patents. In addition, BioTime pays WARF \$25,000 annually as a license maintenance fee. The licensing fees less the amortized portion were included in deferred license fees in BioTime’s condensed consolidated balance sheet as of March 31, 2012 and December 31, 2011.

On June 24, 2008, BioTime, along with its subsidiary, ReCyte Therapeutics, entered into a Product Production and Distribution Agreement with Lifeline Cell Technology, LLC for the production and marketing of human embryonic progenitor cells (“hEPC”) or hEPC lines, and products derived from those hEPCs. The products developed under the agreement with Lifeline will be produced and sold for research purposes such as drug discovery and drug development uses. ReCyte Therapeutics paid Lifeline \$250,000, included in the advanced license fee and other fees, to facilitate their product production and marketing efforts. BioTime will be entitled to recover that amount from the share of product sale proceeds that otherwise would have been allocated to Lifeline.

On July 10, 2008, ReCyte Therapeutics entered into a License Agreement with Advanced Cell Technology, Inc. (“ACT”), under which ReCyte Therapeutics acquired exclusive worldwide rights to use ACT’s “ACTCellerate” technology for methods to accelerate the isolation of novel cell strains from pluripotent stem cells. ReCyte Therapeutics paid ACT a \$250,000 license fee and will pay an 8% royalty on sales of products, services, and processes that utilize the licensed technology. Once a total of \$1,000,000 of royalties has been paid, no further royalties will be due. The license will expire in twenty years or upon the expiration of the last to expire of the licensed patents, whichever is later. The \$250,000 license fee less the amortized portion is included in deferred license fees in BioTime’s condensed consolidated balance sheet as of March 31, 2012 and December 31, 2011.

On August 15, 2008, ReCyte Therapeutics entered into a License Agreement and a Sublicense Agreement with ACT under which ReCyte Therapeutics acquired world-wide rights to use an array of ACT technology (the “ACT License”) and technology licensed by ACT from affiliates of Kirin Pharma Company, Limited (the “Kirin Sublicense”). The ACT License and Kirin Sublicense permit the commercialization of products in human therapeutic and diagnostic product markets.

The technology licensed by ReCyte Therapeutics covers methods to transform cells of the human body, such as skin cells, into an embryonic state in which the cells will be pluripotent. Under the ACT License, ReCyte Therapeutics paid ACT a \$200,000 license fee and will pay a 5% royalty on sales of products, services, and processes that utilize the licensed ACT technology, and 20% of any fees or other payments (other than equity investments, research and

development costs, loans and royalties) received by ReCyte Therapeutics from sublicensing the ACT technology to third parties. Once a total of \$600,000 of royalties has been paid, no further royalties will be due. The license will expire in twenty years or upon the expiration of the last-to-expire of the licensed patents, whichever is later. The \$200,000 license fee payment less the amortized portion is included in deferred license fees in BioTime's condensed consolidated balance sheet as of March 31, 2012 and December 31, 2011.

Under the Kirin Sublicense, ReCyte Therapeutics has paid ACT a \$50,000 license fee and will pay a 3.5% royalty on sales of products, services, and processes that utilize the licensed ACT technology, and 20% of any fees or other payments (other than equity investments, research and development costs, loans and royalties) received by ReCyte Therapeutics from sublicensing the Kirin Technology to third parties. ReCyte Therapeutics will also pay to ACT or to an affiliate of Kirin Pharma Company, Limited (“Kirin”), annually, the amount, if any, by which royalties payable by ACT under its license agreement with Kirin are less than the \$50,000 annual minimum royalty due. Those payments by ReCyte Therapeutics will be credited against other royalties payable to ACT under the Kirin Sublicense. The license will expire upon the expiration of the last to expire of the licensed patents, or May 9, 2016 if no patents are issued. The \$50,000 license fee payment less the amortized portion is included in deferred license fees in BioTime’s condensed consolidated balance sheet as of March 31, 2012 and December 31, 2011.

On February 29, 2009, ReCyte Therapeutics entered into a Stem Cell Agreement with Reproductive Genetics Institute (“RGI”). In partial consideration of the rights and licenses granted to ReCyte Therapeutics by RGI, BioTime issued to RGI 32,259 common shares, having a market value of \$50,000 on the effective date of the Stem Cell Agreement. This \$50,000 payment less the amortized portion is included in deferred license fees in BioTime’s condensed consolidated balance sheet as of March 31, 2012 and December 31, 2011.

Through BioTime’s acquisition of the assets of Cell Targeting, Inc. during March 2011, BioTime acquired a royalty-bearing, exclusive, worldwide license from the Sanford-Burnham Medical Research Institute (“SBMRI”) to use certain patents pertaining to homing peptides for preclinical research investigations of cell therapy treatments, and to enhance cell therapy products for the treatment and prevention of disease and injury in conjunction with BioTime’s own proprietary technology or that of a third party. BioTime assigned the SBMRI license to OncoCyte during July 2011. OncoCyte will pay SBMRI a royalty of 4% on the sale of pharmaceutical products, and 10% on the sale of any research-use products that OncoCyte develops using or incorporating the licensed technology; and 20% of any payments OncoCyte receives for sublicensing the patents to third parties. The royalties payable to SBMRI may be reduced by 50% if royalties or other fees must be paid to third parties in connection with the sale of any products. An annual license maintenance fee is payable each year during the term of the license, and after commercial sales of royalty bearing products commence, the annual fee will be credited towards OncoCyte’s royalty payment obligations for the applicable year. OncoCyte will reimburse SBMRI for 25% of the costs incurred in filing, prosecuting, and maintaining patent protection, subject to OncoCyte’s approval of the costs. OncoCyte incurred no royalty expenses during the year. See Note 8.

Cell Cure Neurosciences has entered into an Amended and Restated Research and License Agreement with Hadasit Medical Research Services and Development, Ltd. (“Hadasit”) under which Cell Cure Neurosciences received an exclusive license to use certain of Hadasit’s patented technologies for the development and commercialization for hES cell-derived cell replacement therapies for retinal degenerative diseases. Cell Cure Neurosciences paid Hadasit 249,058 New Israeli Shekels as a reimbursement for patent expenses incurred by Hadasit, and pays Hadasit quarterly fees for research and product development services under a related Product Development Agreement.

If Teva Pharmaceutical Industries Ltd. (“Teva”) exercises its option to license OpRegen™ or OpRegen-Plus™ under the terms of a Research and Exclusive License Option Agreement (the “Teva License Option Agreement”), Cell Cure Neurosciences will pay Hadasit 30% of all payments made by Teva to Cell Cure Neurosciences, other than payments for research, reimbursements of patent expenses, loans or equity investments.

If Teva does not exercise its option and Cell Cure Neurosciences instead commercializes OpRegen™ or OpRegen-Plus™ itself or sublicenses the Hadasit patents to a third party for the completion of development or commercialization of OpRegen™ or OpRegen-Plus™, Cell Cure Neurosciences will pay Hadasit a 5% royalty on sales of products that utilize the licensed technology. Cell Cure Neurosciences will also pay sublicensing fees ranging from 10% to 30% of any payments Cell Cure Neurosciences receives from sublicensing the Hadasit patents to companies other than

Teva. Commencing in January 2017, Hadasit will be entitled to receive an annual minimum royalty payment of \$100,000 that will be credited toward the payment of royalties and sublicense fees otherwise payable to Hadasit during the calendar year. If Cell Cure Neurosciences or a sublicensee other than Teva paid royalties during the previous year, Cell Cure Neurosciences may defer making the minimum royalty payment until December and will be obligated to make the minimum annual payment to the extent that royalties and sublicensing fee payments made during that year are less than \$100,000.

If Teva does not exercise its option under the Teva License Option Agreement and instead Cell Cure Neurosciences or a sublicensee other than Teva conducts clinical trials of OpRegen™ or OpRegen-Plus™, Hadasit will be entitled to receive certain payments from Cell Cure Neurosciences upon the first attainment of certain clinical trial milestones in the process of seeking regulatory approval to market a product developed by Cell Cure Neurosciences using the licensed patents. Hadasit will receive \$250,000 upon the enrollment of patients in the first Phase I clinical trial, \$250,000 upon the submission of Phase II clinical trial data to a regulatory agency as part of the approval process, and \$1 million upon the enrollment of the first patient in the first Phase III clinical trial.

BioTime acquired a license from the University of Utah to use certain patents in the production and sale of certain hydrogel products. Under the License Agreement, BioTime will pay a 3% royalty on sales of products and services performed that utilize the licensed patents. Commencing in 2013, BioTime will be obligated to pay minimum royalties to the extent that actual royalties on products sales and services utilizing the patents are less than the minimum royalty amount. The minimum royalty amounts are \$15,000 in 2013, \$22,500 in 2014, and \$30,000 each year thereafter during the term of the License Agreement. BioTime shall also pay the University of Utah 30% of any sublicense fees or royalties received under any sublicense of the licensed patents. See Note 9.

BioTime will pay the University of Utah \$5,000 upon the issuance of each of the first five licensed patents issued in the U.S., subject to reduction to \$2,500 for any patent that the University has licensed to two or more other licensees for different uses. BioTime will also pay a \$225,000 milestone fee within six months after the first sale of a “tissue engineered product” that utilizes a licensed patent. A tissue engineered product is defined as living human tissues or cells on a polymer platform, created at a place other than the point-of-care facility, for transplantation into a human patient.

On August 23, 2011, BioTime entered into a License Agreement with Cornell University for the worldwide development and commercialization of technology for the differentiation of human embryonic stem cells into vascular endothelial cells.

Cornell will be entitled to receive a nominal initial license fee and nominal annual license maintenance fees. The obligation to pay annual license maintenance fees will end when the first human therapeutic products developed under the license is sold. BioTime will pay Cornell a milestone payment upon the achievement of a research product sale milestone amount, and will make milestone payments upon the attainment of certain FDA approval milestones for therapeutic products developed under the license, including (i) the first Phase II clinical trial dosing of a human therapeutic product, (ii) the first Phase III clinical trial dosing of a human therapeutic product; (iii) FDA approval of the first human therapeutic product for age-related vascular disease; and (iv) FDA approval of the first human therapeutic product for cancer.

BioTime will pay Cornell royalties on the sale of products and services using the license, and will share with Cornell a portion of any cash payments, other than royalties, that BioTime receives for the grant of sublicenses to non-affiliates. The potential royalty percentage rates to be paid to Cornell will be in the low to mid-single digit range depending on the product. BioTime will also reimburse Cornell for costs related to the patent applications and any patents that may issue that are covered by the license.

In conjunction with the License Agreement, BioTime also entered into a Sponsored Research Agreement under which scientists at Weill Cornell Medical College will engage in certain research for BioTime over a three year period beginning August 2011.

In December, 2011, BioTime entered into two agreements with USCN Life Science, Inc. (USCN), a Chinese company. One agreement is a License Option Agreement that grants BioTime the right, but not the obligation, to license from USCN certain technology and any related patents that may issue, and certain hybridoma cell lines for the

purpose of deriving new products and technologies for use in diagnostic procedures and in therapeutics for the treatment of disease, as well as for products intended for research use only. The other Agreement BioTime entered into with USCNI is an assay kit Supply Agreement under which BioTime will purchase a wide array of assay kits designed for enzyme-linked immunosorbent assay (ELISA) and chemiluminescent immuno assay (CLIA) directed to the stem cell research community and for research use only.

In January 2012, BioTime entered into a License Agreement and a Sponsored Research Agreement with The Wistar Institute in Philadelphia, PA through which it obtained an exclusive license to use technology related to a gene called SP100. The Wistar Institute will be entitled to receive an initial license fee, annual license maintenance fees, royalties based on the sale of any products BioTime or its subsidiaries may develop and sell using the licensed technology, sublicense fees if it sublicenses the technology to third parties, and a milestone payment upon the attainment of the initial approval of the FDA or other foreign regulatory agency for the marketing of the first product that utilizes the licensed technology. BioTime also agreed to fund research at The Wistar Institute to advance the technology, and we will receive certain rights to negotiate additional licenses for any technologies invented as a result of the research

## 7. Equity

### Warrants

BioTime has issued warrants to purchase its common shares as payments for services and in connection to certain business acquisitions. At March 31, 2012, 636,613 warrants to purchase common shares with a weighted average exercise price of \$9.12 and a weighted average remaining contractual life of 1.43 years were outstanding.

### Preferred Shares

BioTime is authorized to issue 1,000,000 shares of preferred stock. The preferred shares may be issued in one or more series as the board of directors may by resolution determine. 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, references, 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.

As of March 31, 2012 BioTime has no issued and outstanding preferred shares.

### Common Shares

BioTime is authorized to issue 75,000,000 common shares with no par value. As of March 31, 2012, BioTime had issued and outstanding 50,321,962 common shares.

During the three months ended March 31, 2012, no options or warrants were exercised.

During the three months ended March 31, 2012 and 2011, BioTime recognized stock-based compensation expenses of \$473,434 and \$433,336, respectively, due to stock options granted to employees and directors. During the three months ended March 31, 2012 and 2011, BioTime granted 105,000 and 71,593 options, respectively, under its 2002 Stock Option Plan.



## 8. Cell Targeting, Inc. Asset Purchase

On January 28, 2011, BioTime acquired substantially all of the assets of Cell Targeting, Inc. (“CTI”), a company that was engaged in research in regenerative medicine. The assets acquired consist primarily of patents, patent applications, and licenses to use certain patents. BioTime issued 261,959 of common shares and paid CTI \$250,000 in cash to acquire the assets. The assets will be used by OncoCyte, which is developing cellular therapeutics for the treatment of cancer using vascular progenitor cells engineered to destroy malignant tumors.

The asset purchase is being accounted for as a business combination under the acquisition method of accounting. This means that even though BioTime did not directly assume and will not directly pay CTI’s debts or other liabilities, for financial accounting purposes CTI’s financial statements as of January 28, 2011, the date of the acquisition, are being consolidated with those of BioTime. In accordance with ASC 805, the total purchase consideration is allocated to the net tangible and identifiable intangible assets acquired and the CTI liabilities outstanding based on the estimated fair value of the assets and the amount of the liabilities as of January 28, 2011. BioTime amortizes intangible assets over their useful lives, which BioTime estimates to be 10 years.

The total purchase price of \$2,550,000 is being allocated as indicated as follows:

### Components of the purchase price:

BioTime common shares	\$ 2,300,000
Cash	250,000
Total purchase price	\$ 2,550,000

### Allocation of purchase price:

#### Assets acquired and liabilities assumed:

Cash	\$ 3,150
Other current assets	2,443
Due from sellers	593,353
Intangible assets	2,419,287
Current liabilities	(468,233 )
Net assets acquired	\$ 2,550,000

The fair value of the shares issued was \$8.78, the average closing price per share of BioTime common shares as reported on the NYSE Amex for the twenty (20) trading days immediately preceding the third trading day prior to the closing date, January 28, 2011.

## 9. Merger with Glycosan BioSystems, Inc.

On March 21, 2011, BioTime completed the acquisition of Glycosan BioSystems, Inc. (“Glycosan”) through a merger of Glycosan into OrthoCyte. Through the merger, OrthoCyte acquired all of Glycosan's assets, including manufacturing equipment, inventory, and technology licenses, and assumed Glycosan's obligations, which at March 18, 2011 totaled approximately \$252,000 and primarily consisted of trade payables, accrued salaries, legal fees, and repayment of amounts advanced to Glycosan. BioTime issued 332,903 common shares and 206,613 warrants to purchase BioTime common shares in connection with the merger.

In January 2012, all Glycosan related activities were transferred to BioTime. The decision was made to transfer the Glycosan technology back to BioTime based upon the discussion and recommendation of BioTime’s management and Board of Directors. It is management’s judgment that the Glycosan activities as it relates to an enabling technology and along with BioTime’s agreement with the University of Utah are more appropriately accounted for under BioTime,

rather than OrthoCyte which research focuses on developing therapies to treat orthopedic disorders, diseases and injuries.

The merger is being accounted for under the acquisition method of accounting. In accordance with ASC 805, the total purchase consideration is allocated to the net tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values as of March 21, 2011. BioTime amortizes intangibles over their useful lives, which BioTime estimates to be 10 years. In accordance with ASC 805, BioTime does not amortize goodwill. The purchase price was allocated using the information currently available, and may be adjusted after obtaining more information regarding, among other things, asset valuations, liabilities assumed, and revisions of preliminary estimates.

The total purchase price of \$3,554,879 is being allocated as indicated:

Components of the purchase price:

BioTime common shares	\$ 2,600,000
BioTime warrants	954,879
Total purchase price	\$ 3,554,879

Allocation of purchase price:

Assets acquired and liabilities assumed:

Cash	\$ 5,908
Other current assets	64,520
Property, plant and equipment, net	81,183
Intangible assets	3,592,039
Current liabilities	(188,771 )
Net assets acquired	\$ 3,554,879

The fair value of the shares issued was \$7.81, the average closing price of BioTime common shares as reported on the NYSE Amex for the 10 trading days immediately preceding February 11, 2011, the date of the Merger Agreement. The fair value of the warrants issued was computed using a Black Scholes Merton option pricing model, which utilized the following assumptions: expected term of three years, which is equal to the contractual life of the warrants; risk-free rate of 1.12%; no expected dividend yield; 109.01% expected volatility; a stock price of \$7.56; and an exercise price of \$10.

#### 10. Unaudited Pro Forma Interim Financial Information –Three Months Ended March 31, 2012 and 2011

The following unaudited pro forma information gives effect to the acquisition of Cell Targeting and Glycosan as if the acquisition took place on January 1, 2011. The pro forma information does not necessarily reflect the results of operations that would have occurred had the entities been a single company during the periods presented.

	Three Months Ended March 31,	
	2012	2011
	(Unaudited)	(Unaudited)
Revenues	\$ 631,946	\$ 1,067,546
Net loss available to common shareholders	\$ (4,973,342)	\$ (3,989,567)
Net loss per common share – basic and diluted	\$ (0.10 )	\$ (0.08 )

#### 11. Subsequent Events

On April 19, 2012 BioTime and its wholly owned subsidiary LifeMap entered into an Agreement and Plan of Merger with XenneX, Inc. ("XenneX") pursuant to which XenneX agreed to merge with LifeMap. Through the merger, XenneX stockholders will receive, in the aggregate, approximately 1,362,589 shares of LifeMap common stock, which will represent approximately 13% of the LifeMap common stock outstanding upon the closing of the transaction. XenneX shareholders will also receive approximately 448,430 BioTime common shares as part of the transaction. The acquisition is expected to close on or about May 18, 2012.

Subsequent events – These condensed consolidated financial statements were approved by management and the Board of Directors, and were issued on May 9, 2012. Subsequent events have been evaluated through that date.

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations is intended to provide information necessary to understand our condensed consolidated financial statements for the three months ended March 31, 2012 and 2011, and highlight certain other information which, in the opinion of management, will enhance a reader's understanding of our financial condition, changes in financial condition and results of operations. In particular, the discussion is intended to provide an analysis of significant trends and material changes in our financial position and the operating results of our business during the quarter ended March 31, 2012 as compared to the quarter ended March 31, 2011. This discussion should be read in conjunction with our Condensed Consolidated Financial Statements for the three months ended March 31, 2012 and 2011 and related notes included elsewhere in this Quarterly Report on Form 10-Q. These historical financial statements may not be indicative of our future performance. This Management's Discussion and Analysis of Financial Condition and Results of Operations contains a number of forward-looking statements, all of which are based on our current expectations and could be affected by the uncertainties and risks described throughout this filing, particularly in "Item 1A. Risk Factors."

Overview

We are a biotechnology company focused on the emerging field of regenerative medicine. Our core technologies center on stem cells capable of becoming all of the cell types in the human body, a property called pluripotency. Products made from these "pluripotent" stem cells are being developed by us and our subsidiaries, each of which concentrates on different medical specialties, including: neuroscience, oncology, orthopedics, and blood and vascular diseases. Our commercial strategy is heavily focused on near-term commercial opportunities including our current line of research products such as ACTCellerate™ cell lines and associated ESpan™ culture media, HyStem® hydrogels, human embryonic stem cell lines, and royalties from Hextend®. Potential near term therapeutic product opportunities include Renevia™ (formerly known as HyStem®-Rx) as a cell delivery device expected to launch in Europe in 2013, and the launch of PanC-Dx™ as a novel blood-based cancer screen, expected by 2014 in Europe. Our long-term strategic focus is to provide regenerative therapies for age-related degenerative diseases.

"Regenerative medicine" refers to an emerging field of therapeutic product development that may allow all human cell and tissue types to be manufactured on an industrial scale. This new technology is made possible by the isolation of human embryonic stem ("hES") cells, and by the development of "induced pluripotent stem ("iPS") cells" which are created from regular cells of the human body using technology that allows adult cells to be "reprogrammed" into cells with pluripotency like young hES-like cells. These pluripotent hES and iPS cells have the unique property of being able to branch out into each and every kind of cell in the human body, including the cell types that make up the brain, the blood, the heart, the lungs, the liver, and other tissues. Unlike adult-derived stem cells that have limited potential to become different cell types, pluripotent stem cells may have vast potential to supply an array of new regenerative therapeutic products, especially those targeting the large and growing markets associated with age-related degenerative disease. Unlike pharmaceuticals that require a molecular target, therapeutic strategies in regenerative medicine are generally aimed at regenerating affected cells and tissues, and therefore may have broader applicability. Regenerative medicine represents a revolution in the field of biotechnology with the promise of providing therapies for diseases previously considered incurable.

Our commercial efforts in regenerative medicine include the development and sale of products designed for research applications in the near term as well as products designed for diagnostic and therapeutic applications in the medium and long term. We offer advanced human stem cell products and technology that can be used by researchers at universities and at companies in the bioscience and biopharmaceutical industries. We have developed research and clinical grade hES cell lines that we market for both basic research and therapeutic product development. Our subsidiary, ES Cell International Pte Ltd ("ESI"), has developed six hES cell lines that are among the best characterized and documented cell lines available today. Developed using current Good Manufacturing Practices ("cGMP") that

facilitate transition into the clinic, these hES cell lines are extensively characterized and five of the six cell lines currently have documented and publicly-available genomic sequences. The ESI hES cell lines are now included in the Stem Cell Registry of the National Institutes of Health (“NIH”), making them eligible for use in federally funded research, and all are available for purchase through [www.biotimeinc.com](http://www.biotimeinc.com). We also market human embryonic progenitor cell (“hEPCs”) developed using ACTCellerate™ technology. These hEPCs are purified lineages of cells that are intermediate in the developmental process between embryonic stem cells and fully differentiated cells. We expect that hEPCs will simplify the scalable manufacture of highly purified and identified cell types and will possess the ability to become a wide array of cell types with potential applications in research, drug discovery, and human regenerative stem cell therapies. The ACTCellerate™ cell lines are also available for purchase through [www.biotimeinc.com](http://www.biotimeinc.com).

Research products can be marketed without regulatory or other governmental approval, and thus offer relatively near-term business opportunities, especially when compared to therapeutic products. The medical devices that we and our subsidiaries are developing will require regulatory approval for marketing, but the clinical trial and approval process for medical devices is often faster and less expensive than the process for the approval of new drugs and biological therapeutics. Our current and near-term product opportunities, combined with expected long-term revenues from the potentially very large revenue cell-based therapeutic products under development at our subsidiaries, provide us with a balanced commercial strategy. The value of this balance is apparent in the commercial field of regenerative medicine as competitors whose sole focus is on long-term therapeutic products have found it challenging to raise the requisite capital to fund clinical development.

Our HyStem® hydrogel product line is one of the components in our near-term revenue strategy. HyStem® is a patented biomaterial that mimics the human extracellular matrix, which is the network of molecules surrounding cells in organs and tissues that is essential to cellular function. Many tissue engineering and regenerative cell-based therapies will require the delivery of therapeutic cells in a matrix or scaffold to sustain cell survival after transplantation and to maintain proper cellular function. HyStem® is a unique hydrogel that has been shown to support cellular attachment and proliferation in vivo and is currently being used by researchers at a number of leading medical schools in pre-clinical studies of stem cell therapies to facilitate wound healing, for the treatment of ischemic stroke, brain cancer, vocal fold scarring, and for myocardial infarct repair. Our HyStem® hydrogels may have other applications when combined with the diverse and scalable cell types our scientists have isolated from hES cells.

Renevia™ (formerly known as HyStem®-Rx) is a clinical grade formulation of HyStem-C®, a biocompatible, implantable hyaluronan and collagen-based matrix for cell delivery in human clinical applications. As an injectable product, Renevia™ may address an immediate need in cosmetic and reconstructive surgeries and other procedures by improving the process of transplanting adipose derived cells, mesenchymal stem cells, or other adult stem cells. We will need to obtain approval by the U.S. Food and Drug Administration (“FDA”) and comparable regulatory agencies in foreign countries in order to market Renevia™ as a medical device. Our goal is to initiate clinical trials in the European Union by late 2012 for CE marking.

Our subsidiary, OncoCyte Corporation, is developing PanC-Dx™, a novel non-invasive blood-based cancer screening test designed to detect the presence of various human cancers, including cancers of the breast, lung, bladder, uterus, stomach, and colon, during routine check -ups. We intend to initially seek regulatory approval to market PanC-Dx™ in Europe before seeking regulatory approvals required to market the product in the U.S. and other countries.

We have organized several subsidiaries to undertake our cell replacement therapeutic programs, diagnostic product programs, and our research product programs. We will partly or wholly fund these subsidiaries, recruit their management teams, assist them in acquiring technology, and provide general guidance for building the subsidiary companies. We may license patents and technology to the subsidiaries that we do not wholly own under agreements that will entitle us to receive royalty payments from the commercialization of products or technology developed by the subsidiaries.

The following table shows our subsidiaries, their respective principal fields of business, our percentage ownership, and the country where their principal business is located:

Subsidiary	Field of Business	BioTime Ownership	Country
ES Cell International Pte. Ltd.	Stem cell products for research, including clinical grade cell lines produced under cGMP	100%	Singapore
OncoCyte Corporation	Diagnosis and treatment of cancer	75.3%	USA

Edgar Filing: BIOTIME INC - Form 10-Q

OrthoCyte Corporation	Orthopedic diseases, including osteoarthritis	100%	USA
Cell Cure Neurosciences, Ltd.	Age-related macular degeneration Multiple sclerosis Parkinson's disease	53.6%	Israel
ReCyte Therapeutics, Inc. (formerly Embryome Sciences, Inc.)	Blood and vascular diseases including coronary artery disease Endothelial progenitor cells and iPS cell banking	95.15%	USA
BioTime Asia, Limited	Ophthalmologic, skin, musculo-skeletal system, and hematologic diseases for Asian markets. Stem cell products for research	81%	Hong Kong
LifeMap Sciences, Inc.	Stem cell database(1)	100%	USA
LifeMap Sciences, Ltd.	Stem cell database	100% (2)	Israel



(1) LifeMap has entered into an Agreement and Plan of Merger to acquire XenneX, Inc. (“XenneX”), a company that holds exclusive licenses to market GeneCards® and PanDaTox, two online databases for research in the fields of biotechnology, pharmaceutical development, and life sciences. LifeMap has also plans to market a database pertaining to diseases.

(2) LifeMap Sciences, Ltd. is a wholly-owned subsidiary of LifeMap Sciences, Inc.

Initially, we developed blood plasma volume expanders and related technology for use in surgery, emergency trauma treatment, and other applications. Our lead blood plasma expander product, Hextend®, is a physiologically balanced intravenous solution used in the treatment of hypovolemia, a condition caused by low blood volume, often from blood loss during surgery or injury. Hextend® maintains circulatory system fluid volume and blood pressure, and keeps vital organs perfused during surgery and trauma care. Hextend® is manufactured and distributed in the U.S. by Hospira, Inc., and in South Korea by CJ CheilJedang (“CJ”), under license from us.

#### Additional Information

HyStem®, Hextend® and PentaLyte® are registered trademarks of BioTime, Inc., and Renevia™, ESpan™, and ESpy™ are trademarks of BioTime, Inc. ReCyte™ is a trademark of ReCyte Therapeutics, Inc. ACTCellerate™ is a trademark licensed to us by Advanced Cell Technology, Inc. PanC-Dx™ is a trademark of OncoCyte Corporation.

We were incorporated in 1990 in the state of California. Our principal executive offices are located at 1301 Harbor Bay Parkway, Alameda, California 94502. Our telephone number is (510) 521-3390.

### Stem Cells and Products for Regenerative Medicine Research

We are marketing our stem cell products for research through our website [biotimeinc.com](http://biotimeinc.com). By an agreement with ReCyte Therapeutics, Millipore Corporation became a worldwide distributor of certain ACTCellerate™ hEPC lines and related ESspan™ growth media. These lines are being marketed and distributed on a worldwide basis. The ACTCellerate™ hEPC lines and ESspan™ growth media products distributed by Millipore may also be purchased directly from us on our website [biotimeinc.com](http://biotimeinc.com). In addition to the products that we are co-marketing with Millipore, we now offer 92 other ACTCellerate™ hEPC lines for sale on our website, and we anticipate adding additional cell lines and related ESspan™ growth media and differentiation kits over time. We are also offering ACTCellerate™ hEPCs and ESspan™ growth media in Asia through BioTime Asia's distribution agreement with Genext.

Six hES cell lines developed under cGMP by our subsidiary ESI are available for purchase from us through [www.biotimeinc.com](http://www.biotimeinc.com). These hES cell lines are included in the NIH Stem Cell Registry, making them eligible for use in federally funded research, and five of the six cell lines currently have documented and publicly-available genomic sequences.

We have acquired from RGI an array of hES cell lines carrying inherited genetic diseases such as cystic fibrosis and muscular dystrophy. Study of these cell lines will enable researchers to better understand the mechanisms involved in causing their corresponding disease states, which may in turn expedite the search for potential treatments.

We have also targeted for development ESpy™ cell lines, which will be derivatives of hES cells that will emit beacons of light. These light-emitting cells will allow researchers to track the location and distribution of the cells in both in vitro and in vivo studies. As new products are developed, they will become available for purchase on [biotimeinc.com](http://biotimeinc.com).

### Plasma Volume Expander Products

Royalties and licensing fees related to our plasma volume expander products, primarily Hextend®, comprise a significant part of our operating revenues. Hextend® has become the standard plasma volume expander at a number of prominent teaching hospitals and leading medical centers and is part of the Tactical Combat Casualty Care protocol of the U.S. Armed Forces.

Under our license agreements, Hospira and CJ will report sales of Hextend® and pay us the royalties and license fees due on account of such sales after the end of each calendar quarter. We recognize revenues in the quarter in which the sales report is received, rather than the quarter in which the sales took place.

Based on sales of Hextend® that occurred during the first quarter of 2012, we expect to receive royalties of \$96,499 from Hospira and we have received \$29,938 from CJ during the second quarter of 2012. Total royalties of \$126,437 for the quarter decreased 27% from royalties of \$172,520 received during the same period last year. These royalties will be reflected in our financial statements for the second quarter of 2012.

### Research and Development Programs in Regenerative Medicine and Stem Cell Research

We entered the fields of stem cell research and regenerative medicine during October 2007. From that time through 2009, our activities in those fields included acquiring rights to market stem cell lines, pursuing patents, planning future products and research programs, applying for research grants, identifying the characteristics of various acquired progenitor and stem cell lines, negotiating a product distribution agreement, organizing new subsidiaries to address particular fields of product development, and planning and launching our first product development programs.



The following table summarizes the most significant achievements in our primary research and development programs in stem cell research and regenerative medicine.

Company	Program	Status
BioTime(1) and ESI	ACTCellerate™ cell lines/growth media/reagent kits for stem cell research  GMP hES cell lines	Nearly 300 products for stem cell research are now being offered, including ACTCellerate™ hEPCs, ESpan™ cell line optimal growth media, and reagent cell differentiation kits. We plan to add additional cell lines, growth media, and differentiation kits with characterization of new hEPCs  ESI has developed and offers for sale GMP hES cell lines for research purposes. Six ESI hES cell lines have been approved by the NIH for use in federally funded research.
BioTime(1)	CIRM-funded research project addressing the need for industrial-scale production of purified therapeutic cells	Conducted long-term stability studies of hEPCs using commercial-type culture processes to demonstrate phenotypic stability and genotypic stability during culture expansion.  Attempting to define a molecular signature of cell surface markers that would be unique to a given hEPC cell line to permit development of reagents to those markers that can be used to purify the target hEPCs intended for therapy.  Mapping cell surface protein expression directly on hEPCs using large collections of commercially available antibodies and have begun testing those antibodies as affinity reagents for purifying target hEPCs.  Identifying peptide reagents that show specificity for cell surface targets on hEPCs and could thus be used directly as affinity reagents.
BioTime(1) and OrthoCyte (3)	Biocompatible hydrogels that mimic the human extracellular matrix	Demonstrated that those cell lines can be combined with BioTime's Renevia™ matrices to formulate a combination product for treating cartilage deficits.  Developed Extralink®, PEGgel™, and HyStem® hydrogel products for basic laboratory research use  Conducted pre-clinical development of Renevia™ as an implantable cell delivery device  Conducted toxicology studies of Renevia™ in the brains of laboratory mice. Results show no difference in reactive astrocytes, macrophages/microglia, neuronal number or blood vessel structure between saline controls and Renevia There was no evidence of granulomata or foreign body reaction around either saline or Renevia injection sites.

		Two U.S. patents issued on hydrogels
OncoCyte (2)	Vascular endothelial cells that can be engineered to deliver a toxic payload to the developing blood vessels of a tumor	<p>Developed a derivation protocol that can reproducibly produce populations of endothelial cells with levels of purity and efficiency above those reported in the published literature.</p> <p>Established broad range of support assays to monitor and measure vascular endothelial cell differentiation process.</p> <p>Initiated in vivo experiments monitoring incorporation of endothelial cells into developing mouse vasculature and into the developing vasculature of human tumor xenografts.</p> <p>Completed initial development of a toxic payload transgene system which can be induced at the site of tumors to destroy cancer cells.</p>
	Genetic markers for cancer diagnosis	<p>Demonstrated that many of the same genes associated with the normal growth of embryonic stem cells are abnormally reactivated by cancer cells. Based on this finding, and utilizing its proprietary algorithms, OncoCyte has discovered and filed patent applications on over 100 novel cancer-associated genes.</p> <p>Initiated development of PanC-DX™, a novel blood-based diagnostic screening test designed to detect the presence of multiple cancer types with superior accuracy</p>

Company	Program	Status
OrthoCyte (3)	Cartilage repair using embryonic progenitor cells	<p>Identified several cell lines that displayed molecular markers consistent with the production of definitive human cartilage.</p> <p>Confirmed chondrogenic potential in joint defects in rat models of osteoarthritis.</p>
ReCyte Therapeutics	Therapeutic products for cardiovascular and blood diseases utilizing its proprietary ReCyte™ iPS technology.	<p>Evaluating effects of telomere length on growth potential of iPS cells and iPS-derived progenitor lines.</p> <p>Through BioTime, formed a collaboration with researchers at Cornell Weill Medical College to derive clinical vascular endothelium for the treatment of age-related vascular disease.</p> <p>Demonstrated the feasibility of producing highly purified product using ACTCellerate™ technology.</p>
BioTime	Hextend® – Blood plasma volume expanders	Hextend® is currently marketed to hospitals and physicians in the USA and Korea. Activities include complying with all regulatory requirements and promotional activities.
BioTime Asia	Distributing ACTCellerate™ hEPC lines growth media and reagents	Initial sales of cell lines, growth media, and differentiation kits, to customers in Asia.
Cell Cure Neurosciences (4)	OpRegen™ and OpRegen-Plus™ for treatment of age related macular degeneration	<p>Conducted animal model studies to establish proof of concept.</p> <p>Developed directed differentiation as efficient method for short culture period to produce a supply of retinal pigment epithelial cells.</p> <p>Granted Teva Pharmaceutical Industries, Ltd. an option to complete clinical development of, and to manufacture, distribute, and sell, OpRegen™ and OpRegen-Plus™.</p>
LifeMap (5)	Stem cell database	<p>Developing a database that will permit users to follow the development of embryonic stem cell lines to the thousands of progenitor cell lines and cell lineages branching from them. We aim to enable researchers to determine which cells they need for their research and provide the cell-related information necessary to better understand and develop therapeutics for various diseases such as diabetes, Parkinson's disease, heart failure, arthritis, muscular dystrophy, spinal cord injury, macular degeneration, hearing loss, liver failure, and many other disorders where cells and tissues become dysfunctional and need to be replaced.</p> <p>LifeMap has entered into an agreement to acquire XenneX through a merger. XenneX holds exclusive licenses to market GeneCards® and PanDaTox, two online databases for research</p>

in the fields of biotechnology, pharmaceutical development, and life sciences. LifeMap has also plans to market a database, MalaCards, pertaining to diseases.

- (1) During late December 2010, our subsidiary, Embryome Sciences, Inc., changed its name to ReCyte Therapeutics, Inc. in conjunction with a change of its business focus to the research and development of therapeutic products to treat blood and vascular diseases and disorders. Embryome Sciences' research products business and ACTCellerate™ hEPC research and development projects, including related patent and technology rights, are being assigned to BioTime or other BioTime subsidiaries. The hydrogel products were acquired in 2011 through the merger of Glycosan into OrthoCyte, but were assigned to BioTime in January 2012.
- (2) OncoCyte was organized during October 2009 and received \$4,000,000 of initial capital from private investors.
- (3) OrthoCyte was organized during June 2010. The hydrogel products were acquired in 2011 through the merger of Glycosan into OrthoCyte, but were assigned to BioTime in January 2012.
- (4) We acquired our interest in Cell Cure Neurosciences during 2010. Cell Cure Neurosciences received \$7,100,000 of additional equity financing during October 2010 from us and two of its other principal shareholders.
- (5) LifeMap was organized during April 2011.

The inherent uncertainties of developing new products for stem cell research and for medical use make it impossible to predict the amount of time and expense that will be required to complete the development and commence commercialization of new products. There is no assurance that we or any of our subsidiaries will be successful in developing new technologies or stem cell products, or that any technology or products that may be developed will be proven safe and effective for treating diseases in humans, or will be successfully commercialized. Most of our potential therapeutic products are at a very early stage of preclinical development. Before any clinical trials can be conducted by us or any of our subsidiaries, the company seeking to conduct the trials would have to compile sufficient laboratory test data substantiating the characteristics and purity of the stem cells, conduct animal studies, and then obtain all necessary regulatory and clinical trial site approvals, after which a team of physicians and statisticians would need to be assembled to perform the trials. Clinical trials will be costly to undertake and will take years to complete. See our discussion of the risks inherent in our business and the impact of government regulation on our business in the “Risk Factors” section and “Business” section of this report.

We believe each of our subsidiaries has sufficient capital to carry out its current research and development plan during 2012. We may provide additional financing for our subsidiaries, or obtain financing from third parties, based on the following: our evaluation of progress made in their respective research and development programs, any changes to or the expansion of the scope and focus of their research, and our projection of future costs. See “Liquidity and Capital Resources” for a discussion of our available capital resources, our potential need for future financing, and possible sources of capital.

#### Research and Development Expenses

The following table shows the approximate percentages of our total research and development expenses of \$4,178,781 and \$2,948,861 allocated to our primary research and development projects during the quarters ended March 31, 2012 and 2011, respectively

Company	Program	Quarter Ended March	
		2012	2011
BioTime, ReCyte Therapeutics and ESI	ACTCellerate™ hPECs, GMP hES cell lines, and related research products	16.0%	27.8%
BioTime	CIRM sponsored ACTCellerate™ technology	9.4%	16.1%
BioTime and OrthoCyte	Hydrogel products and HyStem research	10.7%	0.5%
OncoCyte	Cancer therapy and diagnosis	20.6%	13.8%
OrthoCyte	Orthopedic therapy	4.0%	7.0%
ReCyte Therapeutics	IPS and vascular therapy	6.5%	5.8%
BioTime	Hextend®	4.6%	3.4%
BioTime Asia	Stem cell products for research	0.8%	2.6%
Cell Cure Neurosciences	OpRegen™, OpRegen-Plus™, and neurological disease therapies	20.6%	23.0%
LifeMap	Stem cell database	6.8%	0.0%

#### Critical Accounting Policies

Revenue recognition – We comply with SEC Staff Accounting Bulletin guidance on revenue recognition. Royalty and license fee revenues consist of product royalty payments and fees under license agreements and are recognized when earned and reasonably estimable. We recognize revenue in the quarter in which the royalty reports are received rather than the quarter in which the sales took place. When we are entitled to receive up-front nonrefundable licensing or similar fees pursuant to agreements under which we have no continuing performance obligations, the fees are



recognized as revenues when collection is reasonably assured. When we receive up-front nonrefundable licensing or similar fees pursuant to agreements under which we do have continuing performance obligations, the fees are deferred and amortized ratably over the performance period. If the performance period cannot be reasonably estimated, we amortize nonrefundable fees over the life of the contract until such time that the performance period can be more reasonably estimated. Milestone payments, if any, related to scientific or technical achievements are recognized in income when the milestone is accomplished if (a) substantive effort was required to achieve the milestone, (b) the amount of the milestone payment appears reasonably commensurate with the effort expended, and (c) collection of the payment is reasonably assured. Grant income is recognized as revenue when earned.

Patent costs – Costs associated with obtaining patents on products or technology developed are expensed as general and administrative expenses when incurred. This accounting is in compliance with guidance promulgated by the Financial Accounting Standards Board (“FASB”) regarding goodwill and other intangible assets.

Research and development – We comply with FASB requirements governing accounting for research and development costs. Research and development costs are expensed when incurred, and consist principally of salaries, payroll taxes, consulting fees, research and laboratory fees, and license fees paid to acquire patents or licenses to use patents and other technology from third parties.

Stock-based compensation – We have adopted accounting standards governing share-based payments, which require the measurement and recognition of compensation expense for all share-based payment awards made to directors and employees, including employee stock options, based on estimated fair values. We utilize the Black-Scholes Merton option pricing model. Our determination of fair value of share-based payment awards on the date of grant using an option-pricing model is affected by our stock price as well as assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to, expected stock price volatility over the term of the awards, and actual and projected employee stock option exercise behaviors. The expected term of options granted is derived from historical data on employee exercises and post-vesting employment termination behavior. The risk-free rate is based on the U.S. Treasury rates in effect during the corresponding period of grant. Although the fair value of employee stock options is determined in accordance with recent FASB guidance, changes in the subjective assumptions can materially affect the estimated value. In management’s opinion, the existing valuation models may not provide an accurate measure of the fair value of employee stock options because the option-pricing model value may not be indicative of the fair value that would be established in a willing buyer/willing seller market transaction.

Treasury stock – We account for BioTime common shares issued to subsidiaries for future potential working capital needs as treasury stock on the consolidated balance sheet. We have the intent and ability to register any unregistered shares to support the marketability of the shares.

Impairment of long-lived assets – Our long-lived assets, including intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be fully recoverable. If an impairment indicator is present, we evaluate recoverability by a comparison of the carrying amount of the assets to future undiscounted net cash flows expected to be generated by the assets. If the assets are impaired, the impairment recognized is measured by the amount by which the carrying amount exceeds the estimated fair value of the assets.

Deferred license and consulting fees – Deferred license and consulting fees consist of the value of warrants issued to third parties for services and to the minority shareholder in BioTime Asia for its participation in the organization of that company, and deferred license fees paid to acquire rights to use the proprietary technologies of third parties. The value of the warrants is being amortized over the lives of the warrants, and deferred license fees over the estimated useful lives of the licensed technologies or licensed research products. The estimation of the useful life any technology or product involves a significant degree of inherent uncertainty, since the outcome of research and development or the commercial life of a new product cannot be known with certainty at the time that the right to use the technology or product is acquired. We will review its amortization schedules for impairments that might occur earlier than the original expected useful lives. See also Note 6 to the Condensed Consolidated Interim Financial Statements.

Principles of consolidation – Our consolidated financial statements include the accounts of our wholly-owned subsidiaries, OrthoCyte, LifeMap, and ESI, the accounts of ReCyte Therapeutics, a subsidiary of which we owned approximately 95.15% of the outstanding shares of common stock as of March 31, 2012; the accounts of OncoCyte, a subsidiary of which we owned approximately 75.3% of the outstanding shares of common stock as of March 31, 2012; the accounts of BioTime Asia, a subsidiary of which we owned approximately 81% of the outstanding shares as of March 31, 2012, and the accounts of Cell Cure Neurosciences, a subsidiary of which we owned approximately 53.6% of the outstanding shares as of March 31, 2012. All material intercompany accounts and transactions have been eliminated in consolidation. The consolidated financial statements are presented in accordance with accounting principles generally accepted in the U.S. and with the accounting and reporting requirements of Regulation S-X of the SEC.



## Results of Operations

### Revenues

Under our license agreements with Hospira and CJ, our licensees report sales of Hextend® and pay us the royalties and license fees due on account of such sales within 90 days after the end of each calendar quarter. We recognize such revenues in the quarter in which the sales report is received, rather than the quarter in which the sales took place. For example, royalties on sales made during the fourth quarter of 2011 were not recognized until the first quarter of fiscal year 2012. Royalty revenues recognized for the first quarter of 2012 were \$118,565 from Hospira and \$28,431 from CJ. Royalty revenues in the first quarter of 2012 also include amortization of prepaid royalty revenues of \$388. Total royalties of \$147,384 for the quarter decreased by \$68,587 or 32% from royalties of \$215,971 received from Hospira and CJ during the same period last year.

The decrease in royalties is attributable to a decrease in Hextend® sales in the U.S., which was slightly offset by an increase in sales in the Republic of Korea. The decrease in royalties received from Hospira based on sales during the previous quarter is generally due to the rapid decline in the price of hetastarch-based products in the market. The blood volume expander marketing is shrinking overall and hospitals have shifted their purchases to albumin products. Hospira has reported that they have seen a rapid decline in the price of hetastarch-based plasma expanders in the market which could continue to have a negative impact on revenues from the sale of Hextend®. Hospira has implemented further price reductions for Hextend® during 2012 in an attempt to maintain market share.

We recognized as revenue \$36,468 and \$65,661 of license fees from CJ and Summit during the three months ended March 31, 2012 and 2011, respectively. The license fees were received from CJ during April 2003 and July 2004, and from Summit during December 2004 and April and October of 2005, but full recognition of the license fees has been deferred, and is being recognized over the life of the contracts, which has been estimated to last until approximately 2019 based on the current expected life of the governing patent covering our products in Korea and Japan. See Note 1 to the Condensed Consolidated Interim Financial Statements. License fees for the three months ended March 31, 2011 also includes \$38,938 earned through ESI.

We recognized revenue of \$392,665 from our research grant from CIRM during the three months ended March 31, 2012 and in the same period last year. Grant revenues for the three months ended March 31, 2012 also includes \$8,144 recognized through Cell Cure Neurosciences. Grant revenues for the three months ended March 31, 2011 also includes \$18,315 and \$4,631 recognized through OrthoCyte and OncoCyte.

### Operating Expenses

Research and development expenses increased to \$4,178,781 for the three months ended March 31, 2012, from \$2,948,861 for the three months ended March 31, 2011. As of March 31, 2012 and 2011, research and development expenses also included \$1,209,849 and \$1,105,064, respectively, of research and development expenses incurred by ESI and Cell Cure Neurosciences, of which \$385,454 and \$405,648, respectively, is derived from the amortization of patent technology related to our acquisition of those subsidiaries in May and October 2010, respectively. Aside from these expenses, the increase in research and development expenses during 2012 is primarily attributable to an increase of \$507,708 in employee compensation and related costs allocated to research and development expenses, an increase of \$192,514 in HyStem® program related research expenses, an increase of \$71,962 in scientific consulting fees, an increase of \$79,878 in patent related legal fees, an increase of \$60,402 in rent allocated to research and development expenses, and an increase of \$64,890 in expenditures made to cover laboratory expenses and supplies. Research and development expenses include laboratory study expenses, patent and technology license fees, employee compensation, rent, insurance, and science-related consultants' fees.



The following table shows the amount of our total research and development expenses allocated to our primary research and development projects during the three months ended March 31, 2012 and 2011.

		Quarter Ended March 31,	
Company	Program	2012	2011
BioTime and ESI	ACTCellerate hEPCs, GMP hES cell lines, and related research products	\$ 672,305	\$ 818,952
BioTime	CIRM sponsored ACTCellerate technology	\$ 391,717	\$ 474,756
BioTime and OrthoCyte(1)	Hydrogel products and HyStem® research	\$ 446,035	\$ 13,476
OncoCyte	Cancer therapy and diagnostics	\$ 861,750	\$ 406,359
OrthoCyte	Orthopedic therapy	\$ 166,898	\$ 206,984
ReCyte Therapeutics	IPS and vascular therapy	\$ 269,949	\$ 170,455
BioTime	HyStem®	\$ 192,191	\$ 100,666
BioTime Asia	Stem cell products for research	\$ 33,982	\$ 76,355
Cell Cure Neurosciences	OpRegen™, OpRegen-Plus™, and neurological disease therapies	\$ 859,623	\$ 680,858
LifeMap	Stem cell database	\$ 284,331	\$ -

(1) OrthoCyte transferred its HyStem® product line and related research to BioTime during January 2012.

General and administrative expenses increased to \$2,368,705 for the quarter ended March 31, 2012 from \$1,901,655 for the three months ended March 31, 2011. As of March 31, 2012 and 2011, general and administrative expenses also included \$205,169 and \$115,996, respectively, of general and administrative expense incurred by ESI and Cell Cure Neurosciences, which we acquired in May and October of 2010, respectively. The increase is further attributable to an increase of \$241,020 in employee compensation, bonuses and related costs allocated to general and administrative expenses, an increase of \$93,944 general consulting fees, an increase of \$40,660 in marketing and advertising fees, and an increase of \$58,523 in travel, lodging and entertainment expenses allocated to general and administrative expenses. These increases are in part offset by a decrease of \$69,221 in general outside services. General and administrative expenses include employee and director compensation allocated to general and administrative expenses, consulting fees other than those paid for science-related consulting, insurance costs allocated to general and administrative expenses, stock exchange-related costs, depreciation expense, shipping expenses, marketing costs, and other miscellaneous expenses.

#### Interest and Other Income (Expense)

For the three months ended March 31, 2012, we earned \$8,410 of interest income net of \$112 of interest expense, compared to interest income of \$13,286 net of \$96 of interest expense for the three months ended March 31, 2011.

Other expenses for the three months ended March 31, 2012 includes reversal of \$204,934 in revenues recognized by ESI. The \$204,934 represents US \$200,000 that was recognized as revenues in 2011 upon the shipment of cell lines in accordance with an agreement between ESI and a customer. The difference of \$4,934 is attributed to foreign currency rates. The revenue for the cell lines shipped to the customer was reversed pending the final completion of audits and acceptance of vials by the customer which was incorrectly assumed to have occurred in December 2011.

#### Income Taxes

During the three months ended March 31, 2012 and 2011, we had no Federal and state income tax obligations because we have substantial net operating loss carryovers and have provided a 100% valuation allowance for any deferred

taxes.

26

---

## Liquidity and Capital Resources

At March 31, 2012, we had \$16,487,906 of cash and cash equivalents on hand. We will depend upon revenue from the sale of our research products, royalties from the sale of Hextend by Hospira and CJ, and research grants from CIRM and other providers as our principal sources of revenues for the near future.

Because our revenues from product sales and royalties are not presently sufficient to cover our operating expenses, we may need to obtain additional equity capital or debt in order to finance our operations. The future availability and terms of equity or debt financing are uncertain. We presently have issued and outstanding 636,613 common share purchase warrants, of which 556,613 are exercisable at a price of \$10.00 per share, and 80,000 at \$3.00 per share. These warrants expire on various dates ranging from September 2012 to May 2014. None of the warrants are publicly traded.

The unavailability or inadequacy of financing or revenues to meet future capital needs could force us to modify, curtail, delay, or suspend some or all aspects of our planned operations. Sales of additional equity securities could result in the dilution of the interests of present shareholders.

## Cash generated by operations

During the three months ended March 31, 2012, we received \$590,494 of cash in our operations. Our sources of that cash were \$118,565 of royalty revenues from Hospira, \$28,449 of royalty revenues from CJ, a \$392,665 research grant payment from CIRM, and a \$50,815 payment from the sale of research products.

## Cash used in operations

During the three months ended March 31, 2012, our total research and development expenditures were \$4,178,781, and our general and administrative expenditures were \$2,368,705. Net loss attributable to BioTime for the three months ended March 31, 2012, amounted to \$4,973,342. Net cash used in operating activities during the quarter amounted to \$5,716,934. The difference between the net loss and net cash used in operating activities during the quarter was primarily attributable to non-cash expenses and accrued revenues, including \$316,058 in stock-based compensation paid to employees and consultants, \$157,376 in options issued as independent director compensation, amortization of \$535,737 in intangible assets, \$194,062 amortization of deferred consulting fees, \$27,500 amortization of deferred license fees, \$88,692 in depreciation expense, \$116,290 in prepaid expenses and other current assets, and \$204,934 in reduction in receivables from the reversal of revenues. This overall difference was offset to some extent by amortization of \$38,691 in deferred license and royalty revenues, \$1,074,946 in accounts payable and accrued liabilities, and net loss of \$1,260,995 allocable to the noncontrolling interest in our subsidiaries.

## Cash flows from investing activities

During the three months ended March 31, 2012, \$117,129 was used for investing activities. The primary component of cash expended was \$116,603 used in the purchase of equipment.

## Cash generated by financing activities

During the three months ended March 31, 2012, there were no financing activities.

## Contractual obligations



We had no fixed, non-cancelable contractual obligations as of March 30, 2012, with the exception of office and laboratory facility operating leases. The lease of our office and laboratory in Alameda, California expires on February 29, 2016. We have an option to extend the lease for one additional term of five years, with the rent to be determined at the time of the extension based on the prevailing market rate for comparable facilities. Base monthly rent under our current Alameda facility lease is \$28,947 per month and will increase by three percent each year. In addition to the base rent, we pay a pro rata share of real property taxes and certain costs associated to the operation and maintenance of the building in which the leased premises are located.

ESI's lease of office space in Singapore expires on January 12, 2013. Base monthly rent under that lease is S\$2,952 (Singapore dollars). ESI's Singapore lease of lab space expires on October 31, 2012. Base monthly rent under the Singapore laboratory lease is S\$8,700 (Singapore dollars). In addition to base rent, ESI 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.

LifeMap's lease of office space in Tel Aviv, Israel expired on April 30, 2012. Base monthly rent under that lease was ILS 15,000 per month. The lease was renewed with additional space effective June 1, 2012 through May 31, 2015. Base monthly rent under the lease will be ILS 20,720 per month. The original lease was extended through May 31 as the new space was not ready on May 1. In addition to base rent, LifeMap 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.

Cell Cure Neurosciences' lease of office and laboratory space in Israel expires on June 1, 2014. Base monthly rent for that facility is approximately \$9,600. In addition to base rent, Cell Cure Neurosciences 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.

#### Future capital needs

The amount and pace of research and development work that we can do or sponsor, and our ability to commence and complete the clinical trials that are required in order for us to obtain FDA and foreign regulatory approval of products, depend upon the amount of money we have. We curtailed the pace and scope of our plasma volume expander development efforts due to the limited amount of funds available. Future research and clinical study costs are not presently determinable due to many factors, including the inherent uncertainty of these costs and the uncertainty as to timing, source, and amount of capital that will become available for our projects.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Foreign Currency Exchange Risk

We are exposed to some foreign exchange currency risks because we have subsidiaries that are located in foreign countries. We do not engage in foreign currency hedging activities. Because we translate foreign currencies into United States dollars for reporting purposes, currency fluctuations have an impact on our financial results. We believe that our exposure to currency exchange fluctuation risk is mitigated by the fact that our foreign subsidiaries pay their financial obligations almost exclusively in their local currency. As of March 31, 2012, currency exchange rates did not have a material impact on our intercompany transactions with our foreign subsidiaries. However, a weakening of the dollar against the foreign exchange used in the home countries of our foreign subsidiaries could increase our cost of providing additional financing to our foreign subsidiaries in the future. Conversely, a strengthening of the dollar would decrease our cost of making additional investments in those subsidiaries.

Credit Risk

We place most of our cash in United States banks and we invest some of our cash in interest bearing instruments issued by United States banks or the United States Treasury. Deposits with banks may temporarily exceed the amount of insurance provided on such deposits. We monitor the cash balances in our accounts and adjust the cash balances as appropriate, but if the amount of a deposit at any time exceeds the federally insured amount at a bank, the uninsured portion of the deposit could be lost, in whole or in part, if the bank were to fail.

Our foreign subsidiaries deposit their cash in local banks, but if the amount of a deposit at any time exceeds the amount at a bank under the national banking insurance laws, the uninsured portion of the deposit could be lost, in whole or in part, if the bank were to fail.

Interest Rate Risk

We invest a portion of our cash in interest-bearing securities issued by the United States Treasury. The primary objective of our investments is to preserve principal and liquidity while earning a return on our invested capital, without incurring significant risks. The market value of fixed-rate instruments will decline if interest rates rise. Due in part to this factor, our future investment income may fall short of expectations due to changes in market conditions and in interest rates, or we may suffer losses in principal if forced to sell securities which may have declined in fair value due to changes in interest rates.

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 (the "Exchange Act"). Our management, including our principal executive officer, our principal operations officer, and our principal financial officer, have reviewed and evaluated the effectiveness of our disclosure controls and procedures as of a date within ninety (90) days of the filing date of this Quarterly Report on Form 10-Q. 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, our chief operations officer, and our chief financial officer, as appropriate to allow timely decisions regarding required disclosure.

### Changes in Internal Controls

There were no changes in our internal control over financial reporting that occurred during the period covered by this Quarterly Report on Form 10-Q 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.

We are not presently involved in any material litigation or proceedings, and to our knowledge no such litigation or proceedings are contemplated.

### Item 1A. Risk Factors

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

#### Risks Related to Our Business Operations

We have incurred operating losses since inception and we do not know if we will attain profitability

Our comprehensive net losses for the three months ended March 31, 2012 and for the fiscal years ended December 31, 2011, 2010 and 2009 were \$4,849,253, \$17,535,587, \$10,287,280, and \$5,144,499, respectively, and we had an accumulated deficit of \$85,443,351 as of March 31, 2012, and \$80,470,009, \$63,954,509, and \$52,769,891, as of December 31, 2011, 2010, and 2009, respectively. Since inception, we have primarily financed our operations through the sale of equity securities, licensing fees, royalties on product sales by our licensees, and borrowings. More recently, we have financed a portion of our operations with research grants. Ultimately, our ability to generate sufficient operating revenue to earn a profit depends upon our success in developing and marketing or licensing our products and technology.

We will spend a substantial amount of our capital on research and development but we might not succeed in developing products and technologies that are useful in medicine

We are attempting to develop new medical products and technologies.

Many of our experimental products and technologies have not been applied in human medicine and have only been used in laboratory studies *in vitro* or in animals. These new products and technologies might not prove to be safe and efficacious in the human medical applications for which they were developed.

The experimentation we are doing is costly, time consuming, and uncertain as to its results. We incurred research and development expenses amounting to \$4,178,781 during the three months ended March 31, 2012, and \$13,699,691, \$8,191,314, and \$3,181,729 during the fiscal years ended December 31, 2011, 2010, and 2009, respectively.

If we are successful in developing a new technology or product, refinement of the new technology or product and definition of the practical applications and limitations of the technology or product may take years and require the expenditure of large sums of money.

Future clinical trials of new therapeutic products, particularly those products that are regulated as drugs or biological, will be very expensive and will take years to complete. We may not have the financial resources to fund clinical trials on our own and we may have to enter into licensing or collaborative arrangements with larger,

well-capitalized pharmaceutical companies in order to bear the cost. Any such arrangements may be dilutive to our ownership or economic interest in the products we develop, and we might have to accept a royalty payment on the sale of the product rather than receiving the gross revenues from product sales.

Our success depends in part on the uncertain growth of the stem cell industry, which is still in its infancy

The success of our business of selling products for use in stem cell research depends on the growth of stem cell research, without which there may be no market or only a very small market for our products and technology. The likelihood that stem cell research will grow depends upon the successful development of stem cell products that can be used to treat disease or injuries in people or that can be used to facilitate the development of other pharmaceutical products. The growth in stem cell research also depends upon the availability of funding through private investment and government research grants.

There can be no assurance that any safe and efficacious human medical applications will be developed using stem cells or related technology.

Government-imposed restrictions and religious, moral, and ethical concerns with respect to use of embryos or human embryonic stem cells in research and development could have a material adverse effect on the growth of the stem cell industry, even if research proves that useful medical products can be developed using human embryonic stem cells.

We plan to invest in the development of a stem cell data base but there is no assurance that the data base, if successfully completed, can be profitably commercialized

In April 2011, we formed a new subsidiary, LifeMap Sciences, to advance the development and commercialization of our embryonic stem cell database. We have invested approximately \$1,166,000 in LifeMap Sciences and we plan to invest approximately \$333,000 more during May 2012. Our plan is to make the database available for use by stem cell researchers at pharmaceutical and biotechnology companies and other institutions through paid subscriptions or on a fee per use basis, but there is no assurance that the data base will be successfully completed or that LifeMap will be able to generate sufficient paid subscriptions for use of the data base to allow us to recover our investment or earn a profit. LifeMap also plans to acquire the rights to market two online research databases through its planned merger with Xennex, and it also plans to market another online research database, MalaCards, pertaining to diseases. There is no assurance that the marketing of those additional databases will permit LifeMap to operate at a profit.

Sales of our products to date have not been sufficient to generate an amount of revenue sufficient to cover our operating expenses

Hextend is presently the only plasma expander product that we have on the market, and it is being sold only in the United States and South Korea. The royalty revenues that we have received from sales of Hextend have not been sufficient to pay our operating expenses. This means that we need to successfully develop and market or license additional products and earn additional revenues in sufficient amounts to meet our operating expenses.

We will receive additional license fees and royalties if our licensees are successful in marketing Hextend and PentaLyte in Japan, Taiwan, and China, but they have not yet obtained the regulatory approvals required to begin selling those products.

We are also beginning to bring our first stem cell research products to the market, but there is no assurance that we will succeed in generating significant revenues from the sale of those products.

Sales of the products we may develop will be adversely impacted by the availability of competing products

Sales of Hextend® have already been adversely impacted by the availability of other products that are commonly used in surgery and trauma care and sell at low prices.

In order to compete with other products, particularly those that sell at lower prices, our products will have to provide medically significant advantages.

Physicians and hospitals may be reluctant to try a new product due to the high degree of risk associated with the application of new technologies and products in the field of human medicine.



Competing products are being manufactured and marketed by established pharmaceutical companies. For example, B. Braun/McGaw presently markets Hespan®, an artificial plasma volume expander, and Hospira and Baxter International, Inc. manufacture and sell a generic equivalent of Hespan®. Hospira also markets Voluven®, a plasma volume expander containing a 6% low molecular weight hydroxyethyl starch in saline solution.

There also is a risk that our competitors may succeed at developing safer or more effective products that could render our products and technologies obsolete or noncompetitive.

We might need to issue additional equity or debt securities in order to raise additional capital needed to pay our operating expenses

We plan to continue to incur substantial research and product development expenses, largely through our subsidiaries, and we and our subsidiaries will need to raise additional capital to pay operating expenses until we are able to generate sufficient revenues from product sales, royalties, and license fees.

It is likely that additional sales of equity or debt securities will be required to meet our short-term capital needs, unless we receive substantial revenues from the sale of our new products or we are successful at licensing or sublicensing the technology that we develop or acquire from others and we receive substantial licensing fees and royalties.

Sales of additional equity securities by us or our subsidiaries could result in the dilution of the interests of present shareholders.

The amount and pace of research and development work that we and our subsidiaries can do or sponsor, and our ability to commence and complete clinical trials required to obtain regulatory approval to market our pharmaceutical and medical device products, depends upon the amount of money we have

At March 31, 2012, we had \$16,487,906 of cash and cash equivalents on hand. There can be no assurance that we or our subsidiaries will be able to raise additional funds on favorable terms or at all, or that any funds raised will be sufficient to permit us or our subsidiaries to develop and market our products and technology. Unless we and our subsidiaries are able to generate sufficient revenue or raise additional funds when needed, it is likely that we will be unable to continue our planned activities, even if we make progress in our research and development projects.

We may have to postpone some laboratory research and development work unless our cash resources increase through a growth in revenues or additional equity investment or borrowing.

Our business could be adversely affected if we lose the services of the key personnel upon whom we depend

Our stem cell research program is directed primarily by our Chief Executive Officer, Dr. Michael West. The loss of Dr. West's services could have a material adverse effect on us.

If we make strategic acquisitions, we will incur a variety of costs and might never realize the anticipated benefits

Despite our acquisitions of ESI in 2010 and Glycosan and CTI in 2011, we have limited experience in independently identifying acquisition candidates and integrating the operations of acquisition candidates with our company. If appropriate opportunities become available, we might attempt to acquire approved products, additional drug candidates, technologies or businesses that we believe are a strategic fit with our business. If we pursue any transaction of that sort, the process of negotiating the acquisition and integrating an acquired product, drug candidate, technology or business might result in operating difficulties and expenditures and might require significant

management attention that would otherwise be available for ongoing development of our business, whether or not any such transaction is ever consummated. Moreover, we might never realize the anticipated benefits of any acquisition. Future acquisitions could result in potentially dilutive issuances of equity securities, the incurrence of debt, contingent liabilities, or impairment expenses related to goodwill, and impairment or amortization expenses related to other intangible assets, which could harm our financial condition.

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

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process to provide reasonable assurance regarding the reliability of financial reporting for external purposes in accordance with accounting principles generally accepted in the U.S. Internal control over financial reporting includes maintaining records that in reasonable detail accurately and fairly reflect our transactions; providing reasonable assurance that transactions are recorded as necessary for preparation of the financial statements; providing reasonable assurance that receipts and expenditures of our assets are made in accordance with management authorization; and providing reasonable assurance that unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements would be prevented or detected on a timely basis. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our financial statements would be prevented or detected. Our growth and entry into new products, technologies and markets will place significant additional pressure on our system of internal control over financial reporting. Any failure to maintain an effective system of internal control over financial reporting could limit our ability to report our financial results accurately and timely or to detect and prevent fraud.

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

Despite the implementation of security measures, our internal computer systems and those of our contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. Such events could cause interruption of our operations. For example, the loss of data for our product candidates could result in delays in our regulatory filings and development efforts and significantly increase our costs. To the extent that any disruption or security breach was to result in a loss of or damage to our data, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the development of our product candidates could be delayed.

### Risks Related to Our Industry

We will face certain risks arising from regulatory, legal, and economic factors that affect our business and the business of other pharmaceutical development companies. Because we are a small company with limited revenues and limited capital resources, we may be less able to bear the financial impact of these risks than is the case with larger companies possessing substantial income and available capital.

If we do not receive regulatory approvals we will not be permitted to sell our pharmaceutical and medical device products

The pharmaceutical and medical device products that we and our subsidiaries develop cannot be sold until the United States Food and Drug Administration (“FDA”) and corresponding foreign regulatory authorities approve the products for medical use. The need to obtain regulatory approval to market a new product means that:

We will have to conduct expensive and time-consuming clinical trials of new products. The full cost of conducting and completing clinical trials necessary to obtain FDA and foreign regulatory approval of a new product cannot be presently determined, but could exceed our current financial resources.

Clinical trials and the regulatory approval process for a pharmaceutical product can take several years to complete. As a result, we will incur the expense and delay inherent in seeking FDA and foreign regulatory approval of new products, even if the results of clinical trials are favorable.

Data obtained from preclinical and clinical studies is susceptible to varying interpretations that could delay, limit, or prevent regulatory agency approvals. Delays in the regulatory approval process or rejections of an application for approval of a new drug may be encountered as a result of changes in regulatory agency policy.

Because the therapeutic products we are developing with hES and iPS technology involve the application of new technologies and approaches to medicine, the FDA or foreign regulatory agencies may subject those products to additional or more stringent review than drugs or biologicals derived from other technologies.

A product that is approved may be subject to restrictions on use.

The FDA can recall or withdraw approval of a product if problems arise.

We will face similar regulatory issues in foreign countries.

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

Government-imposed restrictions with respect to the use of embryos or human embryonic stem cells in research and development could limit our ability to conduct research and develop new products.

Government-imposed restrictions on the use of embryos or hES cells in the United States and abroad could generally constrain stem cell research, thereby limiting the market and demand for our products. During March 2009, President Obama lifted certain restrictions on federal funding of research involving the use of hES cells, and in accordance with President Obama’s Executive Order, the National Institutes of Health (“NIH”) has adopted new guidelines for determining the eligibility of hES cell lines for use in federally funded research. The central focus of the proposed guidelines is to assure that hES cells used in federally funded research were derived from human embryos that were created for reproductive purposes, were no longer needed for this purpose, and were voluntarily

donated for research purposes with the informed written consent of the donors. The hES cells that were derived from embryos created for research purposes rather than reproductive purposes, and other hES cells that were not derived in compliance with the guidelines, are not eligible for use in federally funded research. A lawsuit, *Sherley v. Sebelius*, is now pending, challenging the legality of the new NIH guidelines. In that litigation, a United States District Court issued a temporary injunction against the implementation of the new NIH guidelines, but the District Court's ruling was vacated by the United States Court of Appeals. The plaintiffs in the case have filed an appeal, and the ultimate resolution of that lawsuit could determine whether the federal government may fund research using hES cells, unless new legislation is passed expressly permitting or prohibiting such funding.

California law requires that stem cell research be conducted under the oversight of a stem cell research oversight committee (“SCRO”). Many kinds of stem cell research, including the derivation of new hES cell lines, may only be conducted in California with the prior written approval of the SCRO. A SCRO could prohibit or impose restrictions on the research that we plan to do.

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

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

Our success will depend in part on our ability to obtain and enforce patents and maintain trade secrets in the United States and in other countries. If we are unsuccessful at obtaining and enforcing patents, our competitors could use our technology and create products that compete with our products, without paying license fees or royalties to us.

The preparation, filing, and prosecution of patent applications can be costly and time consuming. Our limited financial resources may not permit us to pursue patent protection of all of our technology and products throughout the world.

Even if we are able to obtain issued patents covering our technology or products, we may have to incur substantial legal fees and other expenses to enforce our patent rights in order to protect our technology and products from infringing uses. We may not have the financial resources to finance the litigation required to preserve our patent and trade secret rights.

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

We have filed patent applications for technology that we have developed, and we have obtained licenses for a number of patent applications covering technology developed by others, that we believe will be useful in producing new products, and which we believe may be of commercial interest to other companies that may be willing to sublicense the technology for fees or royalty payments. In the future, we may also file additional new patent applications seeking patent protection for new technology or products that we develop ourselves or jointly with others. However, there is no assurance that any of our licensed patent applications, or any patent applications that we have filed or that we may file in the future covering our own technology, either in the United States or abroad, will result in the issuance of patents.

In Europe, the European Patent Convention prohibits the granting of European patents for inventions that concern “uses of human embryos for industrial or commercial purposes.” The European Patent Office is presently interpreting this prohibition broadly, and is applying it to reject patent claims that pertain to human embryonic stem cells. However, this broad interpretation is being challenged through the European Patent Office appeals system. As a result, we do not yet know whether or to what extent we will be able to obtain patent protection for our human embryonic stem cell technologies in Europe.

The recent Supreme Court decision in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, will need to be considered in determining whether certain diagnostic methods can be patented, since the Court denied patent protection for the use of a mathematical correlation of the presence of a well-known naturally occurring metabolite as a means of determining proper drug dosage. Our subsidiary OncoCyte is developing PanC-Dx™ as a cancer

diagnostic test, based on the presence of certain genetic markers for a variety of cancers. Because PanC-Dx™ combines an innovative methodology with newly discovered compositions of matter, we are hopeful that this Supreme Court decision will not preclude the availability of patent protection for OncoCyte's new product. However, like other developers of diagnostic products, we are evaluating this new Supreme Court decision and are waiting to see if the United States Patent and Trademark Office will issue any new guidelines for the patenting of products that test for biological substances.

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

The preparation and filing of patent applications, and the maintenance of patents that are issued, may require substantial time and money.

A patent interference proceeding may be instituted with the United States Patent and Trademark Office (“U.S. PTO”) when more than one person files a patent application covering the same technology, or if someone wishes to challenge the validity of an issued patent. At the completion of the interference proceeding, the PTO will determine which competing applicant is entitled to the patent, or whether an issued patent is valid. Patent interference proceedings are complex, highly contested legal proceedings, and the PTO’s decision is subject to appeal. This means that if an interference proceeding arises with respect to any of our patent applications, we may experience significant expenses and delay in obtaining a patent, and if the outcome of the proceeding is unfavorable to us, the patent could be issued to a competitor rather than to us.

Oppositions to the issuance of patents may be filed under European patent law and the patent laws of certain other countries. As with the U.S. PTO interference proceedings, these foreign proceedings can be very expensive to contest and can result in significant delays in obtaining a patent or can result in a denial of a patent application.

Our patents may not protect our products from competition

We or our subsidiaries have patents in the United States, Canada, the European Union countries, Australia, Israel, Russia, South Africa, South Korea, Japan, Hong Kong, and Singapore, and have filed patent applications in other foreign countries for our plasma volume expander, stem cell products, HyStem® and other hydrogels, certain genes related to the development of cancer, and other technologies.

We might not be able to obtain any additional patents, and any patents that we do obtain might not be comprehensive enough to provide us with meaningful patent protection.

There will always be a risk that our competitors might be able to successfully challenge the validity or enforceability of any patent issued to us.

In addition to interference proceedings, the U.S. PTO can re-examine issued patents at the request of a third party seeking to have the patent invalidated. This means that patents owned or licensed by us may be subject to re-examination and may be lost if the outcome of the re-examination is unfavorable to us.

We may be subject to patent infringement claims that could be costly to defend, which may limit our ability to use disputed technologies, and which could prevent us from pursuing research and development or commercialization of some of our products

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





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

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

The price and sale of our products may be limited by health insurance coverage and government regulation

Success in selling our pharmaceutical products may depend in part on the extent to which health insurance companies, HMOs, and government health administration authorities such as Medicare and Medicaid will pay for the cost of the products and related treatment. Presently, most health insurance plans and HMOs will pay for Hextend when it is used in a surgical procedure that is covered by the plan. However, until we actually introduce a new product into the medical marketplace, we will not know with certainty whether adequate health insurance, HMO, and government coverage will be available to permit the product to be sold at a price high enough for us to generate a profit. In some foreign countries, pricing or profitability of health care products is subject to government control, which may result in low prices for our products. In the United States, there have been a number of federal and state proposals to implement similar government controls, and new proposals are likely to be made in the future.

#### Risks Related to our Dependence on Third Parties

We may become dependent on our collaborative arrangements with third parties for a substantial portion of our revenue, and our development and commercialization activities may be delayed or reduced if we fail to initiate, negotiate or maintain successful collaborative arrangements.

We may become dependent on possible future collaborators to develop and commercialize many of our product candidates and to provide the regulatory compliance, sales, marketing and distribution capabilities required for the success of our business. If we fail to secure or maintain successful collaborative arrangements, our development and commercialization activities will be delayed, reduced or terminated, and our revenues could be materially and adversely impacted. Over the next several years, we may depend on these types of collaboration partnerships for a significant portion of our revenue. The expected future milestone payments and cost reimbursements from collaboration agreements could provide an important source of financing for our research and development programs, thereby facilitating the application of our technology to the development and commercialization of our products. These collaborative agreements might be terminated either by us or by our partners upon the satisfaction of certain notice requirements. Our partners may not be precluded from independently pursuing competing products and drug delivery approaches or technologies. Even if our partners continue their contributions to our collaborative arrangements, of which there can be no assurance, they may nevertheless determine not to actively pursue the development or commercialization of any resulting products. Our partners may fail to perform their obligations under the collaborative arrangements or may be slow in performing their obligations. In addition, our partners may experience financial difficulties at any time that could prevent them from having available funds to contribute to these collaborations. If our collaboration partners fail to conduct their commercialization, regulatory compliance, sales and marketing or distribution activities successfully and in a timely manner, or if they terminate or materially modify their agreements with us, the development and commercialization of one or more product candidates could be delayed,

curtailed or terminated because we may not have sufficient financial resources or capabilities to continue such development and commercialization on our own.

We have very limited experience in marketing, selling or distributing our products, and we may need to rely on marketing partners or contract sales companies.

Even if we are able to develop our products and obtain necessary regulatory approvals, we have very limited experience or capabilities in marketing, selling or distributing our products. We rely entirely on Hospira and CJ for the sale of Hextend®. We currently have only limited sales, marketing and distribution resources for selling our stem cell research products, and no marketing or distribution resources for selling any of the medical devices or pharmaceutical products that we are developing. Accordingly, we will be dependent on our ability to build our own marketing and distribution capability for our new products, which would require the investment of significant financial and management resources, or we will need to find collaborative marketing partners or contract sales companies for commercial sale of those products. Even if we find a potential marketing partner, of which there can be no assurance, we may not be able to negotiate a licensing or marketing contract on favorable terms to justify our investment or achieve adequate revenues.

## Risks Pertaining to Our Common Shares

Ownership of our common shares will entail certain risks associated with the volatility of prices for our shares and the fact that we do not pay dividends on our common shares.

Because we are engaged in the development of pharmaceutical and stem cell research products, the price of our stock may rise and fall rapidly

The market price of our shares, like that of the shares of many biotechnology companies, has been highly volatile.

The price of our shares may rise rapidly in response to certain events, such as the commencement of clinical trials of an experimental new drug, even though the outcome of those trials and the likelihood of ultimate FDA approval remain uncertain.

Similarly, prices of our shares may fall rapidly in response to certain events such as unfavorable results of clinical trials or a delay or failure to obtain FDA approval.

The failure of our earnings to meet analysts' expectations could result in a significant rapid decline in the market price of our common shares.

Current economic and stock market conditions may adversely affect the price of our common shares

The stock market has been experiencing extreme price and volume fluctuations which have affected the market price of the equity securities without regard to the operating performance of the issuing companies. Broad market fluctuations, as well as general economic and political conditions, may adversely affect the market price of the common shares.

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

We do not pay cash dividends on our common shares. For the foreseeable future, we anticipate that any earnings generated in our business will be used to finance the growth of our business and will not be paid out as dividends to our shareholders. This means that our stock may not be a suitable investment for anyone who needs to earn income from their investments.

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

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

You may experience dilution of your ownership interests because of the future issuance of additional shares of common and preferred shares by us and our subsidiaries

In the future, we may issue our authorized but previously unissued equity securities, resulting in the dilution of the ownership interests of our present shareholders. We are currently authorized to issue an aggregate of 76,000,000 shares of capital stock consisting of 75,000,000 common shares and 1,000,000 "blank check" preferred shares. As of March 31, 2012, there were 50,321,962 common shares outstanding, 3,438,594 common shares reserved for issuance upon the exercise of outstanding options under our employee stock option plans; and 636,613 shares reserved for issuance upon the exercise of common share purchase warrants. No preferred shares are presently outstanding.

The operation of some of our subsidiaries has been financed in part through the sale of capital stock in those subsidiaries to private investors. Sales of additional subsidiary shares could reduce our ownership interest in the subsidiaries, and correspondingly dilute our shareholder's ownership interests in our consolidated enterprise. Our subsidiaries also have their own stock option plans and the exercise of subsidiary stock options or the sale of restricted stock under those plans would also reduce our ownership interest in the subsidiaries, with a resulting dilutive effect on the ownership interest of our shareholders in our consolidated enterprise.

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

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

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

Previously reported.

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
2.1	Agreement and Plan of Merger, dated February 11, 2011, between Glycosan BioSystems, Inc., OrthoCyte Corporation, and BioTime, Inc. (1)
3.1	Articles of Incorporation with all amendments. (2)
3.2	By-Laws, As Amended. (3)
4.1	Warrant Agreement, dated March 21, 2011 (4)
10.1	Agreement and Plan of Merger, dated April 19, 2012, by and among XenneX, Inc., LifeMap Sciences, Inc., BioTime, Inc. and the stockholders of XenneX, Inc. named therein. (Portions of this exhibit have been omitted pursuant to a request for confidential treatment)*
31	Rule 13a-14(a)/15d-14(a) Certification.*
32	Section 1350 Certification.*
101	Interactive Data File
101.INS	XBRL Instance Document *
101.SCH	XBRL Taxonomy Extension Schema *
101.CAL	XBRL Taxonomy Extension Calculation Linkbase *
101.LAB	XBRL Taxonomy Extension Label Linkbase *
101.PRE	XBRL Taxonomy Extension Presentation Linkbase *
101.DEF	XBRL Taxonomy Extension Definition Document *
(1)	Incorporated by reference to BioTime's Form 10-K for the year ended December 31, 2010.
(2)	Incorporated by reference to Registration Statement on Form S-1, File Number 33-44549 filed with the Securities and Exchange Commission on December 18, 1991, and Amendment No. 1 and Amendment No. 2 thereto filed with the Securities and Exchange Commission on February 6, 1992 and March 7, 1992, respectively.
(3)	Incorporated by reference to Registration Statement on Form S-1, File Number 33-48717 and Post-Effective Amendment No. 1 thereto filed with the Securities and Exchange Commission on June 22, 1992, and August 27, 1992, respectively.

(4) Incorporated by reference to BioTime's Form 10-Q for the quarter ended March 31, 2011

\* Filed herewith

40

---



## 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, 2012

/s/ Michael D. West  
Michael D. West  
Chief Executive Officer

Date: May 9, 2012

/s/ Peter S. Garcia  
Peter S. Garcia  
Chief Financial Officer

Exhibit Numbers	Description
2.1	Agreement and Plan of Merger, dated February 11, 2011, between Glycosan BioSystems, Inc., OrthoCyte Corporation, and BioTime, Inc. (1)
3.1	Articles of Incorporation with all amendments. (2)
3.2	By-Laws, As Amended. (3)
4.1	Warrant Agreement, dated March 21, 2011 (4)
<u>10.1</u>	Agreement and Plan of Merger, dated April 19, 2012, by and among XenneX, Inc., LifeMap Sciences, Inc., BioTime, Inc. and the stockholders of XenneX, Inc. named therein. (Portions of this exhibit have been omitted pursuant to a request for confidential treatment)*
<u>31</u>	Rule 13a-14(a)/15d-14(a) Certification.*
<u>32</u>	Section 1350 Certification.*
101	Interactive Data File
101.INS	XBRL Instance Document *
101.SCH	XBRL Taxonomy Extension Schema *
101.CAL	XBRL Taxonomy Extension Calculation Linkbase *
101.LAB	XBRL Taxonomy Extension Label Linkbase *
101.PRE	XBRL Taxonomy Extension Presentation Linkbase *

101.DEF

XBRL Taxonomy Extension Definition Document \*

(1) Incorporated by reference to BioTime's Form 10-K for the year ended December 31, 2010.

41

---

- (2) Incorporated by reference to Registration Statement on Form S-1, File Number 33-44549 filed with the Securities and Exchange Commission on December 18, 1991, and Amendment No. 1 and Amendment No. 2 thereto filed with the Securities and Exchange Commission on February 6, 1992 and March 7, 1992, respectively.
- (3) Incorporated by reference to Registration Statement on Form S-1, File Number 33-48717 and Post-Effective Amendment No. 1 thereto filed with the Securities and Exchange Commission on June 22, 1992, and August 27, 1992, respectively.
- (4) Incorporated by reference to BioTime's Form 10-Q for the quarter ended March 31, 2011
- \* Filed herewith