

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. T Yes 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). Yes 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 company" in Rule 12b-2 of the Exchange Act.

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

(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 T 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 expressions identify forward-looking statements.

Item 1. Financial Statements

**BIOTIME, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS**

	March 31, 2012 <u>(unaudited)</u>	December 31, <u>2011</u>
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	\$ 16,487,906	\$ 22,211,897
Inventory	54,866	51,174
Prepaid expenses and other current assets	<u>2,101,905</u>	<u>2,692,303</u>
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	<u>18,083,779</u>	<u>18,619,516</u>
TOTAL ASSETS	<u>\$ 38,977,899</u>	<u>\$ 45,829,695</u>
LIABILITIES AND EQUITY		
CURRENT LIABILITIES		
Accounts payable and accrued liabilities	\$ 1,502,207	\$ 2,681,111
Deferred grant income	261,777	261,777
Deferred license revenue, current portion	<u>201,545</u>	<u>203,767</u>
Total current liabilities	1,965,529	3,146,655
LONG-TERM LIABILITIES		
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	<u>255,413</u>	<u>258,620</u>
Total long-term liabilities	1,181,318	1,224,859
Commitments and contingencies		
EQUITY		
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
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	<u>(6,000,000)</u>	<u>(6,000,000)</u>
Total shareholders' equity	24,199,493	28,646,001
Noncontrolling interest	<u>11,631,559</u>	<u>12,812,180</u>
Total equity	35,831,052	41,458,181
TOTAL LIABILITIES AND EQUITY	<u>\$ 38,977,899</u>	<u>\$ 45,829,695</u>

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, 2012	March 31, 2011
REVENUES:		
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
EXPENSES:		
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)
OTHER INCOME/(EXPENSES):		
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)
WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING: 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	
	<u>March 31, 2012</u>	<u>March 31, 2011</u>
CASH FLOWS FROM OPERATING ACTIVITIES:		
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	<u>(5,716,934)</u>	<u>(3,357,439)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
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	<u>(117,129)</u>	<u>(537,983)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:		
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	<u>-</u>	<u>689,831</u>
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	<u>\$ 16,487,906</u>	<u>\$ 30,136,979</u>
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	<u>\$ 1,385,316</u>	<u>\$ 1,347,779</u>

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	<u>\$ 18,083,779</u>	<u>\$ 18,619,516</u>

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
	<u>\$ 1,502,207</u>	<u>\$ 2,681,111</u>

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 USCN 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	<u>\$ 3,554,879</u>
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	<u>(188,771)</u>
Net assets acquired	<u>\$ 3,554,879</u>

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 *Renovia*[™] (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. 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.

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.

Renovia[™] (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, *Renovia*[™] 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 *Renovia*[™] 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
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*. By an agreement with ReCyte Therapeutics, Millipore Corporation became a worldwide distributor of certain *ACTCellerate*[™] hEPC lines and related ESpan[™] growth media. These lines are being marketed and distributed on a worldwide basis. The *ACTCellerate*[™] hEPC lines and ESpan[™] growth media products distributed by Millipore may also be purchased directly from us on our website *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 ESpan[™] growth media and differentiation kits over time. We are also offering *ACTCellerate*[™] hEPCs and ESpan[™] 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. 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*.

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	<p><i>ACTCellerate</i>[™] cell lines/growth media/reagent kits for stem cell research</p> <p>GMP hES cell lines</p>	<p>Nearly 300 products for stem cell research are now being offered, including <i>ACTCellerate</i>[™] hEPCs, <i>ESpan</i>[™] 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</p> <p>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.</p>
BioTime ⁽¹⁾	CIRM-funded research project addressing the need for industrial-scale production of purified therapeutic cells	<p>Conducted long-term stability studies of hEPCs using commercial-type culture processes to demonstrate phenotypic stability and genotypic stability during culture expansion.</p> <p>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.</p> <p>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.</p> <p>Identifying peptide reagents that show specificity for cell surface targets on hEPCs and could thus be used directly as affinity reagents.</p>
BioTime ⁽¹⁾ and OrthoCyte ⁽³⁾	Biocompatible hydrogels that mimic the human extracellular matrix	<p>Demonstrated that those cell lines can be combined with BioTime's <i>Renevia</i>[™] matrices to formulate a combination product for treating cartilage deficits.</p> <p>Developed <i>Extralink</i>[®], <i>PEGgel</i>[™], and <i>HyStem</i>[®] hydrogel products for basic laboratory research use</p> <p>Conducted pre-clinical development of <i>Renevia</i>[™] as an implantable cell delivery device</p> <p>Conducted toxicology studies of <i>Renevia</i>[™] 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 <i>Renevia</i>. There was no evidence of granulomata or foreign body reaction around either saline or <i>Renevia</i> injection sites.</p> <p>Two U.S. patents issued on hydrogels</p>
OncoCyte ⁽²⁾	<p>Vascular endothelial cells that can be engineered to deliver a toxic payload to the developing blood vessels of a tumor</p> <p>Genetic markers for cancer diagnosis</p>	<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> <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 <i>PanC-DX</i>[™], 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	Identified several cell lines that displayed molecular markers consistent with the production of definitive human cartilage. Confirmed chondrogenic potential in joint defects in rat models of osteoarthritis.
ReCyte Therapeutics	Therapeutic products for cardiovascular and blood diseases utilizing its proprietary <i>ReCyte</i> [™] iPS technology.	Evaluating effects of telomere length on growth potential of iPS cells and iPS-derived progenitor lines. 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. Demonstrated the feasibility of producing highly purified product using <i>ACTCellerate</i> [™] technology.
BioTime	<i>Hextend</i> [®] – Blood plasma volume expanders	<i>Hextend</i> [®] 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 <i>ACTCellerate</i> [™] hEPC lines growth media and reagents	Initial sales of cell lines, growth media, and differentiation kits, to customers in Asia.
Cell Cure Neurosciences ⁽⁴⁾	<i>OpRegen</i> [™] and <i>OpRegen-Plus</i> [™] for treatment of age related macular degeneration	Conducted animal model studies to establish proof of concept. Developed directed differentiation as efficient method for short culture period to produce a supply of retinal pigment epithelial cells. Granted Teva Pharmaceutical Industries, Ltd. an option to complete clinical development of, and to manufacture, distribute, and sell, <i>OpRegen</i> [™] and <i>OpRegen-Plus</i> [™] .
LifeMap ⁽⁵⁾	Stem cell database	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. LifeMap has entered into an agreement to acquire XenneX through a merger. XenneX holds exclusive licenses to market <i>GeneCards</i> [®] and <i>PanDaTox</i> , two online databases for research in the fields of biotechnology, pharmaceutical development, and life sciences. LifeMap has also plans to market a database, <i>MalaCards</i> , 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 31,	
		2012	2011
BioTime, ReCyte Therapeutics and ESI	<i>ACTCellerate</i> [™] hPCEs, GMP hES cell lines, and related research products	16.0%	27.8%
BioTime	CIRM sponsored <i>ACTCellerate</i> [™] 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	<i>Hextend</i> [®]	4.6%	3.4%
BioTime Asia	Stem cell products for research	0.8%	2.6%
Cell Cure Neurosciences	<i>OpRegen</i> [™] , <i>OpRegen-Plus</i> [™] , 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.

Company	Program	Quarter Ended March 31,	
		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.

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 Xenex, 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*TM as a cancer diagnostic test, based on the presence of certain genetic markers for a variety of cancers. Because *PanC-Dx*TM 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

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)
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

AGREEMENT AND PLAN OF MERGER

THIS AGREEMENT AND PLAN OF MERGER (this **Agreement**) is entered into as of April 19, 2012, by and among Xennex, Inc. a Massachusetts corporation (**Xennex**); LifeMap Sciences, Inc., a California corporation (**LifeMap**); BioTime, Inc., a California corporation (**BioTime**), and each Xennex Stockholder. Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in Section 6.14 of this Agreement.

WHEREAS, LifeMap is a wholly-owned subsidiary of BioTime; and

WHEREAS, Xennex, LifeMap and BioTime each desire that Xennex merge with and into LifeMap (the **Merger**), subject to and in accordance with the terms and conditions of this Agreement; and

WHEREAS, as a result of the Merger, the Xennex Stockholders will receive common shares, no par value, of BioTime (the **BioTime Shares**), and shares of common stock, no par value, of LifeMap, in exchange for all of their shares of Xennex stock;

IN CONSIDERATION of the representations, warranties, conditions and covenants contained in this Agreement, and for other valuable consideration, the receipt and adequacy of which is hereby acknowledged by the Parties, the Parties agree as follows:

**ARTICLE 1
THE MERGER**

1.1 **Merger of Xennex with and into LifeMap.** Xennex shall merge with and into LifeMap, pursuant to the provisions of Massachusetts General Law, Chapter 156D, Sec.78 Sec.1108 of the California Code, and Section 368(a)(2)(D) of the Internal Revenue Code, and the terms and conditions of this Agreement (the Merger).

(a) The constituent corporations in the Merger are LifeMap and Xennex. LifeMap shall be the surviving corporation of the Merger and will continue to be a California corporation upon consummation of the Merger.

(b) The Merger shall become effective the later of the date on which a copy of this Agreement accompanied by an officer's certificate of each of LifeMap and Xennex, executed in accordance with Sec.173 of the California Code and containing the information required by Sec.1103 of the California Code (the **California Merger Certificate**), is filed in the office of the Secretary of State of California as provided in Sec.1103 of the California Code, or the date on which a certificate of merger, executed in accordance with Massachusetts General Law, Chapter 156D and containing the information required by Massachusetts General Law, Chapter 156D, Sec.11 (the **Massachusetts Merger Certificate**), is filed with the Secretary of State of Massachusetts under Massachusetts General Law, Chapter 156D. The date upon which the Merger becomes effective is referred to in this Agreement as the **Effective Date**. The California Merger Certificate shall be substantially in the form attached as Exhibit A and the Massachusetts Merger Certificate shall be substantially in the form attached as Exhibit B. The California Merger Certificate and the Massachusetts Merger Certificate shall be filed in the offices of the Secretary of State of California and the Secretary of State of Massachusetts, respectively, by LifeMap as the surviving corporation in the Merger. It is the intention of the Parties that the Effective Date be the same as the Closing Date (as defined below), and the California Merger Certificate and the Massachusetts Merger Certificate may be delivered to the offices of the Secretary of State of California and the Secretary of State of Massachusetts, respectively, prior to the Closing Date with a request that such certificates be filed or effective on the Closing Date.

(c) Upon the Effective Date, the separate existence of Xennex shall cease and LifeMap, as the surviving corporation in the Merger, shall succeed, without other transfer, to all the rights and properties of Xennex and shall be subject to all the debts and liabilities of Xennex in the same manner as if the surviving corporation had itself incurred them. All rights of creditors and all liens upon the property of each constituent entity shall be preserved unimpaired, limited in lien to the property affected by such liens immediately prior to the Merger.

(d) As the surviving corporation in the Merger, LifeMap will carry on business with the assets of Xennex, as well as with the assets of LifeMap, after the Merger.

(e) Upon the Effective Date, all Xennex Shares issued and outstanding, shall be deemed cancelled and converted into the right to receive BioTime Shares (or cash in lieu of a fractional BioTime share) and LifeMap Shares in the amounts as provided in Section 1.4. Following the Merger, the present Board of Directors of LifeMap shall serve as the Board of Directors of the surviving corporation until the next annual meeting of shareholders or until such time as their successors have been elected and qualified. If a vacancy shall exist on the Board of Directors of the surviving corporation on the Effective Date, such vacancy may be filled by the Board of Directors of LifeMap as provided in its Bylaws.

1.2 **Articles of Incorporation.** The Articles of Incorporation of LifeMap, as in effect immediately prior to the Effective Date, shall be the Articles of Incorporation of the surviving corporation until altered, amended, or repealed as provided therein or as provided by law; provided, however, that the Articles of Incorporation shall, by filing of the California Merger Certificate, be amended to increase the authorized number of shares of common stock to 12,500,000 and to effect a 1 for 4 reverse stock-split whereby each share of LifeMap common stock outstanding immediately prior to the filing of the California Merger Certificate in the office of the Secretary of State of California shall be converted into 0.25 of a share of LifeMap common stock.

1.3 **Bylaws.** The Bylaws of LifeMap existing on the Effective Date shall continue in full force as the Bylaws of the surviving corporation until altered, amended, or repealed as provided in such Bylaws or by law.

1.4 **Merger Consideration.**

(a) Upon the consummation of the Merger, the outstanding shares of Xennex capital stock, shall automatically and by operation of the Merger be converted into BioTime Shares and LifeMap Shares as follows (the **Merger Consideration**):

(b) The total number of BioTime Shares to be issued to Xennex Stockholders as part of the Merger Consideration, shall be determined by dividing \$2,000,000 by \$4.46 per share which is the weighted average closing price of BioTime Shares as reported on the NYSE Amex for the twenty (20) trading days ending on and including the third trading day immediately preceding the date of this Agreement. The total number of LifeMap Shares to be issued to Xennex Stockholders as part of the Merger Consideration shall be determined by dividing \$2,384,530 by \$1.75, which the Parties agree is the fair market value of one LifeMap Share (as adjusted for the one-for-four reverse stock split to be effected concurrent with the filing of the California Merger Certificate. Accordingly, the number of BioTime Shares to be issued to Xennex Stockholders, collectively, as part of the Merger Consideration shall be 448,430 BioTime Shares; and the number of LifeMap Shares to be issued to Xennex Stockholders as the remainder of the Merger Consideration, shall be 1,362,589 LifeMap Shares.

(i) Based on the forgoing, and Assuming that no additional shares of Xennex common stock, no par value per share (Xennex Stock), are issued and no shares of Xennex Stock are redeemed or reacquired by Xennex, upon the consummation of the Merger, each outstanding share of Xennex Stock, shall be converted into 448.43 BioTime Shares and 1,362.589 LifeMap Shares or the right to receive cash in lieu of any fractional share as provided in Section 1.4(c).

(ii) Notwithstanding the foregoing, the BioTime Shares and LifeMap Shares comprising Escrow Shares within the context of Section 1.7 shall be issued or issuable in the Merger in the name of the Representative for the benefit of the Xennex Stockholders holders as their interests may appear and subject to the terms of this Agreement and the Escrow Agreement (as defined below), including the terms hereof appointing and empowering (and limiting the liability) of the Representative, and all rights of the Xennex Stockholders in respect thereof shall be and are therefore expressly limited accordingly.

(c) No fractional BioTime Shares or fractional LifeMap Shares shall be issued in the Merger. In determining the number of BioTime Shares and LifeMap Shares to be issued to a Xennex Stockholder in the Merger, any fractional BioTime Shares or fractional LifeMap Shares that would otherwise be issuable with respect to the Xennex Shares registered in the name of that Xennex Stockholder shall be aggregated into the greatest number of whole BioTime Shares and whole LifeMap Shares as is feasible in each case. In lieu of issuing any fractional BioTime Share remaining after the aforesaid aggregation of fractions, BioTime shall pay the Xennex Stockholder cash in an amount determined by multiplying the remaining aggregate fraction by the average closing price of a BioTime Share as reported on the NYSE Amex for the twenty (20) trading days immediately preceding the Closing Date. In lieu of issuing any fractional LifeMap Share remaining after the aforesaid aggregation of fractions, LifeMap shall pay the Xennex Stockholder cash in an amount determined by multiplying the remaining aggregate fraction by \$1.75.

(d) As soon as reasonably practicable after the Effective Date, BioTime and LifeMap will mail to each Xennex Stockholder, whose Xennex Shares were converted into the right to receive BioTime Shares and LifeMap Shares, a letter of transmittal and instructions for use in delivering Xennex Share certificates in exchange for certificates representing the BioTime Shares and LifeMap Shares into which the Xennex Stockholder's Xennex Shares were converted in the Merger and cash for in lieu of fractional BioTime Shares and fractional LifeMap Shares, less the Xennex Stockholder's pro rata share of the BioTime Shares and LifeMap Shares held in the Escrow. Xennex stock certificates surrendered for exchange into BioTime Shares and LifeMap Shares shall be cancelled.

1.5 **Meeting of Xennex Stockholders.** Xennex shall duly notice and hold a meeting of its stockholders (the Meeting), in accordance with its bylaws and the Massachusetts Law, at which meeting the Xennex Stockholders legally entitled to vote on the Merger shall be asked to vote to approve this Agreement and the Merger contemplated hereby. Such notice shall be given not less than twenty (20) days prior to the Meeting. In lieu of the calling of such meeting, Xennex may obtain the requisite vote of its shareholders to approve this Agreement and the Merger by written consent or through the exercise by Xennex or a percentage of its stockholders of the rights afforded to them under the Xennex Stockholders Agreement (as defined below).

(a) Not less than twenty (20) days prior to the Meeting (or if a consent is solicited in lieu of such Meeting, at the time of and in connection with the solicitation of such consent), or as determined by the Board of Directors of Xennex, Xennex shall notify each of Xennex Stockholders who was such on the record date for notice of the Meeting that appraisal rights are or may be available for their Xennex Shares under Massachusetts General Law, Chapter 156D, Sec.13, and Xennex shall include in such notice (or with such consent solicitation) a copy of Massachusetts General Law, Chapter 156D, Sec.13. Xennex shall also identify any applicable provisions of the Xennex Stockholders Agreement which may provide for or have the effect of waiving of all or certain such appraisal rights. Each Xennex Stockholder having and electing to demand the appraisal of such Xennex Stockholder's shares under Massachusetts General Law, Chapter 156D, Sec.13 (**Dissenting Shares**) shall deliver to Xennex, before the taking of the vote on the Merger, a written demand for appraisal of such Xennex Stockholder's Xennex Shares, which demand shall reasonably inform Xennex of the identity of the Xennex Stockholder and that the Xennex Stockholder intends thereby to demand the appraisal of such Xennex Stockholder's shares. Not less than twenty (20) days prior to the Meeting or concurrently with the solicitation of consents as aforesaid, or as determined by the Board of Directors of Xennex, Xennex shall submit to each of the Xennex Stockholders (i) the BioTime Disclosure Documents provided to Xennex by BioTime, (ii) the Xennex Disclosure Documents, (iii) a Shareholder Questionnaire in substantially the form attached as Exhibit C hereto in order to solicit information from such Xennex Stockholders as to their status as "accredited investors" (as such term is defined under the rules promulgated under the Securities Act), and (iv), if required by the Escrow Agent (as defined below) a stock transfer power, a LifeMap Share transfer power, and a power of attorney appointing Kenneth Elsner as the Representative of the Xennex Stockholders under the Escrow Agreement (as defined below), to be signed by the Xennex Stockholders and delivered by Xennex to the Escrow Agent under the Escrow Agreement. Xennex shall promptly provide LifeMap and BioTime with copies upon receipt of each completed Shareholder Questionnaire. If BioTime's Annual Report on Form 10-K for the year ended December 31, 2011 (the **2011 10-K**) is not included in the BioTime Disclosure Documents provided to Xennex by BioTime by the date on which Xennex sends the items described in clauses (i) through (iv) to the Xennex Stockholders, then promptly after receipt of the 2011 10-K from BioTime, Xennex shall send a copy of the 2011 10-K to each Xennex Stockholder.

1.6 **Closing; Closing Date.** The consummation of the Merger (the Closing) shall take place at the offices of Thompson, Welch, Soroko & Gilbert, LLP, 235 Pine Street, San Francisco, California, or at a mutually agreed upon location, on such date which is as soon as practical and in any event not more than two Business Days after the satisfaction or waiver of all of the conditions and the taking of all other actions (other than those which by their terms are to be taken or satisfied at the Closing) set forth in Article 5 hereof, or on such other time and date, or at such other place, as Xennex and LifeMap may agree. The date on which the Closing occurs is referred to herein as the "Closing Date". The parties contemplate that the Closing will take place on May 18, 2012.

1.7 **Escrow.** Subject to adjustment under Section 1.9, ninety percent (90%) of the BioTime Shares and LifeMap Shares issuable to the Xennex Stockholders shall be delivered to the Xennex Stockholders as partial payment of the Merger Consideration, and ten percent (10%) of the BioTime Shares and LifeMap Shares issuable in the Merger shall be issued and held in escrow (the Escrow Shares) by Wells Fargo Bank, National Association (Escrow Agent) until the later of (i) the expiration of 180 days following the Closing Date (the Escrow Termination Date); and (ii) the date on which all claims under Section 1.9 in respect of which a claim notice has been issued before the Escrow Termination Date (the Escrow Claim) has been resolved. An Escrow Claim shall not be deemed to have been resolved until (a) Xennex and LifeMap have notified the Escrow Agent in writing that the Escrow Claim has been resolved, or (b) the Escrow Claim has been resolved by a final court judgment or arbitration award. On or before the Closing Date, LifeMap and Xennex, and Kenneth Elsner as Representative of the Xennex Stockholders, shall enter into an escrow agreement with Escrow Agent, in substantially the form attached as Exhibit D (the Escrow Agreement). LifeMap and Xennex agree that the Escrow Agreement shall provide for the delivery of Escrow Shares out of escrow in the manner provided in this Section and in Section 1.9. The Escrow Agreement shall contain a provision under which LifeMap and Xennex agree that, where a resolution of any dispute between the Parties results in an award or judgment from arbitration or any other legal proceeding in accordance with the provisions of Section 1.9, the Escrow Agent shall release the Escrow Shares pursuant to, and following the receipt of, distribution instructions that are consistent with the award or judgment, delivered to the Escrow Agent by the prevailing Party or Parties. The Escrow Shares to be placed in escrow pursuant to this Section 1.7 and the Escrow Agreement will initially be withheld (and subsequently dispersed to the extent provided or allowed under the terms hereof and the Escrow Agreement) from the payment to be made to the Xennex Stockholders pro rata in accordance with their respective individual interests in the Merger Consideration. All costs and expenses incurred for the Escrow Agent or otherwise in connection with the Escrow shall be borne by LifeMap.

1.8 **Indemnification by Xennex.** It is expressly understood and agreed by and among LifeMap, BioTime, and Xennex that the Merger Consideration to be paid in the Merger to the Xennex Stockholders was determined based on the reliance by BioTime and LifeMap upon the Article 2 Warranties. Subject to this Section 1.8, Section 1.9, and Section 1.11., from and after the Closing, the Xennex Stockholders, severally but not jointly, shall be deemed to have agreed to indemnify, defend, and hold harmless LifeMap and BioTime from and against any liability, damage, loss, cost, or expense, including reasonable attorneys' fees and expenses (Losses) which LifeMap or BioTime may sustain as a result of a breach or breaches of the Article 2 Warranties.

1.9 **Setoffs.** To the extent that LifeMap or BioTime incurs any Loss as a result of any breach of any of the Article 2 Warranties, the Merger Consideration shall be deemed reduced by the amount of such Loss, and such reduction shall be applied to the Escrow Shares, by return of such number of Escrow Shares by Escrow Agent to BioTime and LifeMap, as may be computed in accordance with this Section 1.9. The number of the Escrow Shares to be returned to BioTime from the escrow with respect to any Loss shall be the amount of the Loss multiplied by 0.4561 and divided by the then applicable value of each BioTime Share (the BioTime Escrow Share Value). The value of each BioTime Share shall be the average closing price of the BioTime Shares on the NYSE Amex (or on such other exchange or over the counter market on which the BioTime Shares may trade if they are then no longer traded on the NYSE Amex) during twenty (20) trading days immediately prior to the date of the written request signed by each of the Parties for release of such BioTime Escrow Shares from escrow. The number of the Escrow Shares to be returned to LifeMap from the escrow with respect to any Loss shall be the amount of the Loss multiplied by 0.5439 and divided by \$1.75 (the agreed value of each LifeMap Share) (the LifeMap Escrow Share Value). If as a result of any Loss the number of BioTime Escrow Shares is reduced to zero while LifeMap Escrow Shares remain in Escrow, or if the number of LifeMap Escrow Shares is reduced to zero while BioTime Escrow Shares remain in escrow, any subsequent reduction in the Escrow Consideration on account of any Loss shall be applied to the Escrow Shares remaining in escrow. The Escrow Agent shall deliver the BioTime Escrow Shares to BioTime or the transfer agent of such shares, and shall deliver the LifeMap Escrow Shares to LifeMap on account of any Loss within 10 days after receipt of a written request for delivery signed by each of the Parties stating the amount of the Loss and the number of BioTime Escrow Shares and LifeMap Escrow Shares to be returned to BioTime and LifeMap. If the Escrow Agent receives any money as a dividend or distribution with respect to Escrow Shares, or as consideration of any merger or consolidation of BioTime or LifeMap with another business entity, such money shall be applied on account of any Loss before Escrow Shares.

1.10 **Indemnification by BioTime and LifeMap.** It is expressly understood and agreed by and among LifeMap, BioTime, and Xennex that the Merger Consideration to be paid in the Merger to the Xennex Stockholders was determined based on the reliance by Xennex and Xennex Stockholders upon the Article 3 Warranties. From and after the Closing, BioTime and LifeMap, jointly and severally, shall be deemed to have agreed to indemnify, defend, and hold harmless Xennex and the Xennex Stockholders from and against any liability, damage, loss, cost, or expense, including reasonable attorneys' fees and expenses which they or any of them may sustain as a result of a breach or breaches of the Article 3 Warranties.

1.11 **Limitations.**

(a) Notwithstanding anything herein to the contrary, the aggregate deemed liability of the Xennex Stockholders from and after the Closing Date shall not exceed the value of the Merger Consideration (the **Limit**) except in respect of a claim for damages on account of or arising from a claim alleging an intent to defraud or a willful or intentional misrepresentation or omission of a material fact in connection with this Agreement, in which case the deemed liability of the Xennex Stockholders may exceed the Limit on a several, and not joint, basis. No indemnification shall be available to BioTime or LifeMap until the aggregate Loss for which such indemnification is to be made exceeds \$10,000, at which time BioTime and LifeMap shall have the right to collect the amount of the Loss incurred, up to the Limit. Except as provided in this paragraph, this indemnification shall be the sole and exclusive remedy of BioTime and LifeMap. No claim, demand, lawsuit or proceeding for indemnification shall be brought later than one year after the Closing Date, provided, that a lawsuit or other proceeding may be brought after the first anniversary of the Closing Date if a written claim or demand was made with respect to the matter prior to such first anniversary date.

(b) Notwithstanding anything herein to the contrary, the aggregate deemed liability of BioTime and/or LifeMap from and after the Closing Date shall not exceed the **Limit** except in respect of a claim for damages on account of or arising from a claim alleging an intent to defraud or a willful or intentional misrepresentation or omission of a material fact in connection with this Agreement, in which case the deemed liability of the BioTime and/or LifeMap may exceed the Limit on a several, and not joint, basis. No indemnification shall be available to Xennex Stockholders until the aggregate Loss for which such indemnification is to be made exceeds \$10,000, at which time Xennex Stockholders shall have the right to collect the amount of the Loss incurred, up to the Limit. Except as provided in this paragraph, this, indemnification shall be the sole and exclusive remedy of Xennex Stockholders. No claim, demand, lawsuit or proceeding for indemnification shall be brought later than one year after the Closing Date, provided, that a lawsuit or other proceeding may be brought after the first anniversary of the Closing Date if a written claim or demand was made with respect to the matter prior to such first anniversary date.

1.12 **Appointment of Representative.** The approval of this Agreement by the Xennex Stockholders shall constitute the following actions binding upon the Xennex Stockholders:

(a) the irrevocable authorization, direction and appointment of Kenneth Elsner as stockholder representative, and not personally (the **Representative**), as the sole and exclusive agent, attorney-in-fact and representative of each Xennex Stockholder and their respective heirs, representatives and successors in respect of the Escrow Agreement and the Escrow Shares;

(b) the approval and authorization for all of the arrangements relating thereto, including: (i) the execution, delivery and performance of the Escrow Agreement by the Representative, (ii) the receipt and distribution of the Escrow Shares pursuant to the terms hereof and of the Escrow Agreement; (iii) the making any and all determinations which may be required or permitted to be taken by the Representative or the Xennex Stockholders; and (iv) the exercise of such rights, power and authority as are incidental to the foregoing; and

(c) the initial Representative shall indicate in writing his acceptance of such appointment, effective upon approval by the Xennex Stockholders of the Merger, and his agreement to then be bound by the terms of this Agreement as they relate to the Representative and the duties and responsibilities thereof, by executing this Agreement for such limited purpose in the space provided on the signature pages hereof. Any actions, exercises of rights, power or authority and any decisions or determinations made by the Representative within the scope of his appointment pursuant to this Agreement, shall be absolutely and irrevocably binding on each Xennex Stockholder as if each such Person personally had taken such action, exercised such rights, power or authority or made such decision or determination in such Person's individual capacity, but in any event only to the extent of the rights of each such Xennex Stockholder in its capacity as a Xennex Stockholder holding Xennex Shares or rights in and to the receipt or payment of the Merger Consideration pursuant hereto.

(d) The Representative shall not incur any liability with respect to any action taken or suffered by him in reliance upon any note, direction, instruction, consent, statement or other document believed by the Representative to be genuinely and duly authorized, nor for other action or inaction as the Representative, excepting only the willful misconduct or gross negligence of the Representative. If and in the event that the immediately preceding sentence shall not be given effect for any reason, the Representative shall be indemnified and held harmless by the Xennex Stockholders to the extent of their respective pro rata interests in the Escrow Shares (subject in any event to the claims of BioTime), against and from any and all debts, obligations and other liabilities (whether absolute, accrued, contingent, fixed or otherwise, or whether known or unknown, or due or to become due or otherwise), monetary damages, fines, fees, penalties, interest obligations, deficiencies, losses and expenses (including without limitation amounts paid in settlement, interest, court costs, costs of investigators, fees and expenses of attorneys, accountants, financial advisors and other experts, and other expenses of litigation) incurred or suffered by the Representative in connection with or in furtherance of his performance as such hereunder, except to the extent resulting from, relating to or in respect of any actions constituting only the willful misconduct or gross negligence of the Representative. The Representative shall have recourse to the Escrow Shares in each case to the extent of the Xennex Stockholders interest therein, to satisfy any claims or obligations in respect of indemnity as herein above provided, and the Xennex Stockholders shall upon the approval hereof be deemed to have assented thereto.

(e) In the event of the death, physical or mental incapacity or resignation of the Representative, a successor Representative shall be elected by a majority vote of the Xennex Stockholders who have any then-existing indemnity obligations or payment rights (whether contingent or absolute) hereunder, with each such holder (or his successor or assign) to be given a vote equal to the number of Xennex Shares held by such holder immediately prior to the Effective Time pursuant to a procedure to be mutually agreed upon among such holders. Pending the election of a successor Representative, such holder holding the largest number of Xennex Shares prior to the Effective Time shall have the right to act as the interim Representative (or if he declines, the next largest and successively thereafter). Each interim and successor Representative shall have all the power, authority, rights and privileges conferred by this Agreement upon the initial Representative, and the term "Representative" as used herein shall be deemed to include any interim or successor Representative. Any successor Representative shall indicate in writing his acceptance of such appointment and his agreement to be bound by the terms of this Agreement and the Escrow Agreement

1.13 **Registration of BioTime Shares.** On the Closing Date, BioTime shall enter into a Registration Rights Agreement, in the form attached as Exhibit E (the **Registration Rights Agreement**), for the benefit of each Xennex Stockholder who acquires BioTime Shares in the Merger, pursuant to which BioTime shall agree to prepare and file with the United States Securities and Exchange Commission a registration statement registering the BioTime Shares for sale under the Securities Act of 1933, as amended (the **Securities Act**), in accordance with the terms and conditions of the Registration Rights Agreement. All costs and expenses incurred for the preparation, filing and/or registration of the BioTime Shares with respect to this Agreement and to the transactions contemplated by this Agreement shall be borne by BioTime as provided in the Registration Rights Agreement.

ARTICLE 2
REPRESENTATIONS AND WARRANTIES OF XENNEX AND XENNEX STOCKHOLDERS

Xennex and the Xennex Stockholders make the Article 2 Warranties for the benefit and reliance of LifeMap and BioTime. The Article 2 Warranties shall be true and correct in all material respects on the date of this Agreement, and are qualified accordingly. Except in furtherance of the consummation of the Merger, Xennex and the Xennex Stockholders will not take any action, or omit or fail to take any act, in any manner within their control, that would cause any of the Article 2 Warranties to be untrue in any material respect as of the Closing Date. Xennex and the Xennex Stockholders represent and warrant as follows:

2.1 **Organization.** Xennex is a company duly incorporated, validly existing, and in good standing under the laws of the Commonwealth of Massachusetts, and is duly qualified to do business as a foreign corporation in each other state in which the failure to qualify could result in a penalty or fine. Xennex has all requisite corporate power and authority to own its property and assets and carry on its business as now being conducted. Xennex has lawfully carried on its business in the ordinary course of business so as to maintain the same as a going concern, and since December 31, 2011, there has been no material change in its business.

2.2 **Authority; Enforceability.** Xennex has the corporate power and authority to execute and deliver, and to perform all of its obligations under, this Agreement. The execution and delivery of this Agreement, and the performance by Xennex of its obligations under this Agreement, have been duly authorized by all necessary action on the part of Xennex's Board of Directors. This Agreement is the valid and binding agreement of Xennex and the Xennex Stockholders, enforceable in accordance with its terms, except to the extent limited by any bankruptcy, insolvency, or similar law affecting the rights of creditors generally.

2.3 **Capitalization.**

(a) Xennex has the following number of authorized, issued and outstanding shares of capital stock: 200,000 authorized shares of common stock, of which 1,000 shares of common stock are issued and outstanding as of the date hereof; and 0 authorized shares of preferred stock, of which no shares are issued and outstanding as of the date hereof. There are no shares or other ownership interests of Xennex of any other class or series issued. All of the issued and outstanding shares of Xennex capital stock have been legally and validly issued and fully paid and non-assessable. All of the outstanding shares of Xennex capital stock are owned beneficially and of record as of the date hereof as set forth in Schedule 2.3(a).

(b) Except as identified on Schedule 2.3(b), there are no outstanding subscriptions, options, LifeMap Shares, rights, calls, convertible securities, or other agreements entitling any person or entity to purchase or otherwise acquire any shares of Xennex capital stock from Xennex. All shares of Xennex capital stock have been issued and sold by Xennex in compliance with all applicable laws and regulations, including but not limited to the Securities Act and applicable state securities or "blue sky" laws.

2.4 **Subsidiaries.** Xennex has no subsidiaries.

2.5 **No Conflict.** The execution and delivery of this Agreement, and assuming full satisfaction, without waiver, of the condition to Closing set forth in Section 4.3(b), consummation of the transactions contemplated by this Agreement, do not and will not: (a) conflict with or result in a breach of any condition or provision, or constitute a default under or pursuant to the terms of any License listed on Schedule 2.11(a) or Material Contract listed on Schedule 2.16(a); or (b) result in the creation or imposition of any lien, charge, or encumbrance upon any of the assets or properties of Xennex; (c) conflict with or result in a breach of any condition or provision, or constitute a default under or pursuant to the terms of the certificate of incorporation or bylaws of Xennex, or (d) violate any provisions of any federal or state rule, regulation, statute, or law applicable to Xennex with respect to the Merger, or the terms of any order, writ, or decree of any federal or state court or judicial or regulatory authority or body by which Xennex is bound.

2.6 **No Liens.** Except as set forth on Schedule 2.6 hereof, Xennex has good and marketable title to its assets (real and personal, tangible and intangible), free and clear of all mortgage, pledge, lien, security interest, conditional sales agreement, lease, indenture, encumbrance, levy, and attachments of third parties or charge of any nature (collectively, Liens).

2.7 **Condition of Assets.** All plant, machinery, equipment, and vehicles owned or used by Xennex are in good repair and condition having regard to their age and use, are in working order. Xennex's computer hardware and software has been adequately and appropriately maintained and supported.

2.8 **Patents.** Xennex holds no patents.

2.9 **Trademarks.** Schedule 2.9 lists the following information with respect to any and all trademarks that have been filed, registered, or used by Xennex: (a) the trade mark; (b) the name of the registrar; and (c) if filed or registered, the date filed or registered

2.10 **Internet Domain Names.** Schedule 2.10 shows the following information with respect to all internet domain names that have been filed, registered, or used by Xennex: (a) the domain name; (b) the name of the registrar; (c) the date filed/registered; and (d) if not in the English language, the specific language.

2.11 **Licenses.** As used in this Agreement, “Intellectual Property” includes all patents, know-how, methods, formulae, trade secrets, compositions of matter, proprietary information, designs, computer software code, copyrights, and moral rights. The Licenses referred to in this Agreement are limited to the Licenses shown on Schedule 2.11(a) and constitute all of the currently in force and key contracts, licenses, and agreements entitling Xennex to use Intellectual Property owned or licensed by a third party, or entitling third parties to use Xennex’s Intellectual Property. Xennex is not a party to any other currently in-force contract, agreement, understanding, or arrangement for the sale, transfer, assignment, sublicense, termination, amendment, or modification of any of the Licenses or any rights therein. A current, complete, and accurate copy of each License (including, without limitation, all amendments, supplements, schedules, and exhibits thereto) has previously been delivered to LifeMap and BioTime. Each of the Licenses has been duly authorized, executed and delivered by the parties thereto, and to the best of Xennex’s knowledge, each License is the valid and binding agreement of the parties thereto, enforceable in accordance with its terms. Each of the Licenses is in full force and effect. Except as disclosed in Schedule 2.11(b), there exists no breach or default by Xennex to any of the Licenses, and no act, omission, or other event has occurred, which with or without the passage of time or giving of notice, or both, would constitute a breach or default by Xennex under any of the Licenses of sufficient materiality to entitle any party to a License to terminate the License or to recover monetary damages against Xennex. Except as disclosed in Schedule 2.11(b), there are no existing disputes or disagreements of any kind whatsoever between Xennex and any licensor or licensee under any of the Licenses.

2.12 **Royalties and Other Payments.** Except as provided in the Licenses, the Material Contracts, and the Financial Statements, there are no royalties or other license fees payable by Xennex.

2.13 **No Infringement.** To the best knowledge of Xennex and Xennex Stockholders, there are no suits, proceedings, or claims pending or threatened against Xennex which allege any infringement or misappropriation or unauthorized use of any Intellectual Property of any third party. Except as disclosed in Schedule 2.13, Xennex has not to its knowledge misappropriated or made any unauthorized or infringing use of any Intellectual Property belonging to any third party. Xennex has no knowledge of any infringement or unauthorized use of any of Xennex’s Intellectual Property by any third party.

2.14 **Unfair Competition.** To the best of Xennex or Xennex Stockholders knowledge, Xennex has no liability for, and has not engaged in, any practices constituting unfair competition or unfair trade practices, or that are unlawful, under any anti-trust law, or other law or regulation.

2.15 **Confidential Information.** Xennex has taken all commercially reasonable steps to protect and preserve the confidentiality of all Confidential Information. As used in this Agreement, Confidential Information (defined in Section 5.5) includes all non-public information of any kind (including, but not limited to, trade secrets) belonging to Xennex, or belonging to a third party that was obtained by Xennex under a License or other agreement with a third party that requires Xennex to preserve and maintain the secrecy and confidentiality of the information. Xennex’s use, disclosure, or appropriation of Confidential Information belonging to a third party has been pursuant to the terms of a written agreement between Xennex and such third party or otherwise in accordance with law. All current employees of Xennex having access to Confidential Information have agreements with Xennex protecting Xennex’s Confidential Information or proprietary information. Xennex does not know of any unauthorized or misappropriation of Xennex’s Confidential Information by any third party in respect of which Xennex has not taken any action.

2.16 **Material Contracts.** The Material Contracts referred to in this Agreement are limited to the Material Contracts shown on Schedule 2.16(a) and the Licenses. Except for obligations for the payment of legal fees, the Material Contracts and the Licenses constitute all of the currently in-force contracts and agreements to which Xennex is a party, that (a) pertain to the purchase, sale, licensing or use of Xennex's products, (b) require or obligate Xennex to pay to any third party more than \$10,000 during any calendar year, or (c) entitle Xennex to receive from any third party more than \$10,000 during any calendar year. Xennex is not a party to any other currently in-force and key contract or agreement for the sale, transfer, assignment, or licensing of any of Xennex's products or Intellectual Property, or rights to use Xennex's products or Intellectual Property, except pursuant to the Material Contracts or Licenses. Except as disclosed in Schedule 2.16(b), a current, complete, and accurate copy of each Material Contract (including, without limitation, all amendments, supplements, schedules, and exhibits thereto) has previously been delivered to LifeMap and BioTime. Each of the Material Contracts has been duly authorized, executed, and delivered by the parties thereto, and except as disclosed on Schedule 2.16, each Material Contract is the valid and binding agreement of the parties thereto, enforceable in accordance with its terms except to the extent limited by any bankruptcy, insolvency, or similar law affecting the rights of creditors generally. Except as disclosed in Schedule 2.16(c) and Schedule 2.11(b), (i) there exists no breach or default by Xennex under any of the Material Contracts, and no act, omission, or other event has occurred which, with or without the passage of time or giving of notice or both, would constitute a breach or default under any of the Material Contracts of sufficient materiality to entitle any party to a Material Contract to terminate such Material Contract or to recover monetary damages against Xennex; and (ii) no contract, license, or agreement (a) that pertained to the purchase, sale, or use of Xennex's products or Intellectual Property, (b) that required or obligated Xennex to pay to any third party more than \$10,000 during any calendar year, or (c) that entitled Xennex to receive from any third party more than \$10,000 during any calendar year, has been terminated by another party thereto due to an actual or alleged breach or default by Xennex. Except as disclosed in Schedule 2.16(c) and 2.11 (b), there are no existing disputes or disagreements of any kind whatsoever between Xennex and any party to a Material Contract or License.

2.17 **Customer Relations.** There are no existing disputes or disagreements of any kind whatsoever between Xennex and any of the customers for Xennex's products, including, but not limited to, disputes or disagreements regarding payments made or owed, or the quality or performance of any product or Intellectual Property, other than those that may arise or exist in the ordinary course of business and are not material to Xennex or its business.

2.18 **Permits.** The licenses, permits, certificates, and government authorizations described in Schedule 2.18 (the Permits) constitute all of the business and industry related licenses, permits, certificates, and government authorizations necessary to legally conduct the business of Xennex as now being conducted. Schedule 2.18 discloses as to Xennex the Permits held and the jurisdictions that issued the Permits. All of the Permits held by Xennex, as reflected on Schedule 2.18, have been legally and validly issued and are, as at Closing, in full force and effect. The consummation of the sale of the Xennex Shares to LifeMap will not result in the cancellation or termination of any of the Permits.

2.19 **Financial Statements.** Xennex has provided LifeMap and BioTime with financial statements and other financial information as follows (the Financial Statements): (a) income statements and balance sheets for Fiscal Years 2009, 2010; and 2011, and (b) income statements and balance sheets for the month of January 2012. The Financial Statements are true and fair for the periods presented, and the income statements and balance sheets were prepared in conformity with reasonable accounting principles, consistently applied. The balance sheets and statements of income included in the Financial Statements fairly present the financial positions of the business and the results of operations at the dates presented and for the periods then ended. Since December 31, 2011, there has not been any material adverse change in the financial condition, assets, liabilities, revenues, or business of Xennex. Since December 31, 2011, Xennex has not sold or transferred any portion of its assets or property that would be material to Xennex taken as a whole, except for sales of inventory and transfers of cash in payment of trade payables and other expenses, all in the usual and ordinary course of business. As of January 31, 2012, Xennex had no liabilities, indebtedness, or obligations that are not reflected on its January 31, 2012 balance sheet. Since December 31, 2011 Xennex has not incurred any liabilities, indebtedness, or obligations other than trade payables and ordinary, recurring accruals arising in the ordinary course of business and consistent with past practices.

2.20 **Customers Revenues.** Schedule 2.20 is a true and complete schedule showing the sale and licensing of products (including data base information), on a product by product basis to each of Xennex's customers during the twelve months ended December 31, 2011.

2.21 **Products; Services; LifeMap Warranty Claims.** All products sold, licensed, leased, or delivered by Xennex to customers and all services provided by Xennex to customers (including all data base information) on or prior to the Closing Date pursuant to any Material Contracts conform in all material respects to applicable contractual commitments and express and implied warranties (to the extent not subject to legally effective express exclusions of warranties), and conform in all material respects to packaging, labeling, advertising, and marketing materials, and to applicable product or service specifications or documentation. Xennex has no liability and there is no legitimate basis for any present or future action, suit, proceeding, hearing, investigation, charge, complaint, claim, or demand against Xennex giving rise to any material liability relating to the sale of any product or performance of any service by Xennex pursuant to any Material Contracts, or for replacement or repair of any product, or other damages in connection with the sale or licensing of any product or performance of any service (including data base information) by Xennex pursuant to any Material Contracts, in excess of any reserves for such liabilities reflected on the balance sheets included in the Financial Statements.

2.22 **Funding of Xennex.** No current government funding, or funding by or facilities of a university, college, other educational institution, or research center, is being used in the development of any Xennex Intellectual Property or product, except as disclosed in Schedule 2.22.

2.23 **Employees.** Attached hereto as Schedule 2.23, and made a part of this Agreement, is a complete list of the current employees of Xennex and their current salary, bonus entitlements, vacation, sick leave, and other remuneration and benefits. Except as disclosed in Schedule 2.23, Xennex has no liability to such employees for any accrued wages, vacation, sick leave, bonuses, or other benefits. Each Xennex employee is an employee "at will" who may be terminated at any time by Xennex with or without cause. There are no employment agreements between Xennex and any Xennex employee. No Xennex employee is entitled to any bonus, increase in salary, or other remuneration of any kind based on or arising from the execution and delivery of this Agreement or the merger of Xennex into LifeMap.

2.24 **Employee Benefit Plans.** Except as indicated on Schedule 2.24, there are no pension, profit sharing, retirement, health insurance, disability, life insurance, stock option, stock ownership, stock purchase, phantom stock, stock appreciation right, or similar compensation or benefit plan (collectively hereinafter referred to as Employee Benefit Plans) in effect with respect to any of the current employees of Xennex. None of the Employee Benefit Plans are pension, profit sharing, or deferred compensation benefits subject to the Employee Retirement Income Security Act, as amended.

2.25 **Employee Relations.** There are no existing disputes or disagreements of any kind whatsoever between Xennex and any party to an Employment Arrangement, including, but not limited to, disputes or disagreements regarding compensation or benefits paid or owed, the meaning of any term or provision of an Employment Agreement or other Employment Arrangement, the enforceability or validity of an Employment Agreement or other Employment Arrangement, or the sufficiency or quality of services provided or performed by any person under any of the Employment Agreements or other Employment Arrangements. Xennex has received no notification from any party to an Employment Agreement to the effect that such party intends to exercise any right to terminate, cancel, or decline to renew any Employment Agreement, and Xennex has no reason to believe that any party to an Employment Agreement has any intention to take any such action. Xennex has not considered dismissing any current management or other current senior employee, and no current manager or current senior employee has given or received notice terminating his or her employment where termination will take effect on or after Closing.

2.26 **Labor Difficulties.** With respect to all current employees of Xennex, (i) Xennex is in compliance in all material respects with all applicable laws respecting employment and employment practices, terms and conditions of employment, and wages and hours, including, without limitation, any such laws respecting employment discrimination and occupational safety and health requirements, and has received no notice that it is engaged in any unfair labor practice; (ii) there is no unfair labor practice complaint against Xennex pending or threatened before any government agency or authority; (iii) none of the current employees is represented by any union and no negotiations regarding union representation are ongoing; and (iv) no arbitration proceeding arising out of or under any collective bargaining agreement is pending. There are no claims pending, or threatened or capable of arising, against Xennex by any of its current or former employees or workmen or third parties, in respect of an accident or injury which is not fully covered by insurance.

2.27 **Dividends and Distributions.** Except for any dividends and distributions that have been legally paid in full prior to December 31, 2011, the board of directors of Xennex has not (a) declared any dividend or distribution to its shareholders on account of Xennex Shares of any class or series, or (b) set any record date for the determination of holders of Xennex Shares of any class or series entitled to receive any dividend or distribution; provided, however, that a portion Xennex's cash on hand at the Closing Date may be paid to Xennex Stockholders after the Closing Date in accordance with Section 5.8.

2.28 **Taxes.** Xennex has filed when due all federal, state, and local income tax returns, and all other returns with respect to taxes which are required to be filed with the appropriate authorities of the jurisdictions where business is transacted by Xennex, or where Xennex owns any property. All items and entries provided for or reflected in such returns are correct, are made on a proper basis, and are not subject to any adjustment that would result in Xennex (or LifeMap after the Merger) owing any tax, penalties, or interest. All amounts, if any, required to be paid, as shown on such returns, and all assessments and all other taxes, governmental charges, penalties, interest, and fines due and payable on or before the date of this Agreement, have been paid. To the best of the knowledge of Xennex, there are no suits, actions, claims, investigations, inquiries, or proceedings now pending against Xennex in respect of taxes, governmental charges, or assessments; nor are there any matters under discussion with any governmental authority relating to taxes, governmental charges, or assessments asserted by any such authority. Where required under any applicable law, Xennex has withheld from each payment made to each of its current and former employees the amount of all taxes required to be withheld therefrom and has paid the same to the proper tax receiving officers. Xennex is not a party to or bound by any tax indemnity, tax sharing, or tax allocation agreement. All information furnished to the relevant tax authorities or other governmental authorities in any applicable jurisdictions, in connection with the application by Xennex for any consent or clearance, fully and accurately disclosed in all material respects all facts and circumstances material to the decision of each relevant tax authority or other authority. Xennex has not taken any action which has had, or will have on Closing, the result of altering, prejudicing, or in any way disturbing any arrangement or agreement which it has previously had with the relevant tax authority. Xennex has not engaged in, or been a party to, any transaction or series of transactions, or scheme or arrangement, of which the purpose or effect was the avoidance, or deferral, or a reduction in the liability to, taxation, except as may be permitted by applicable tax law and regulations.

2.29 **Litigation; Investigations.** To the best knowledge of Xennex and the Xennex Stockholders there are no lawsuits, actions, claims; or any investigations or inquiries by an administrative agency or governmental body; or any legal, administrative, or arbitration proceedings pending or threatened against Xennex or any of its properties, assets, or business; or to which Xennex is, or in the case of threatened proceedings might become, a party; or any other lawsuit, action, claim, or proceeding pending, or threatened against Xennex, and which (a) challenges Xennex's right to enter into this Agreement, or challenges any action taken or to be taken, by Xennex in connection with this Agreement, or (b) if decided adversely to Xennex could result in the loss of any License, Permit, Material Contract, or patent or (c) could lead to (i) the imposition of any adverse prohibitions, conditions, restrictions, limitations, or requirements on the right of Xennex to conduct its business in the manner in which such business has been conducted by Xennex, (ii) the imposition of any material fine, penalty, or sanction, (iii) the refusal or denial to issue or the cancellation, denial, or refusal to renew any Permit held by Xennex or required for the conduct of any aspect of Xennex's business, (iv) to a judgment against Xennex requiring Xennex to pay damages or other amounts in excess of \$10,000; or (v) fine, penalty, or other sanction has been imposed by any judicial, administrative, or regulatory body or government authority against Xennex. To the best knowledge of Xennex and the Xennex Stockholders there is no outstanding order, writ, injunction, or decree of any court, administrative agency, governmental body, or arbitration tribunal against or affecting Xennex or any of its properties, assets, Intellectual Property (owned or used under any License), business, or prospects. Xennex and/or its current officers, agents, or employees has not, for the purposes of securing any contract for Xennex, given or offered any (i) bribe, (ii) corrupt or unlawful payment or contribution, or (iii) any other corrupt or unlawful inducement.

2.30 **Consents.** No party has a right to terminate any License, Material Contract, the Lease, or any Permit as a result of the Merger, except for such rights as have been or on the Closing Date and assuming full satisfaction, without waiver, of the conditions to Closing set forth in Section 4.3(b), will have been waived in writing.

2.31 **Disclosure.** The information furnished or to be furnished by Xennex to LifeMap and BioTime in the Schedules in connection with the Merger, is true and correct in all material respects.

2.32 **Books and Records.** The financial books and records of Xennex have been prepared and maintained in accordance with reasonable accounting principles, consistently applied, and give a true and fair view of the assets, liabilities, state of affairs, financial position, and results of operation of Xennex.

2.33 **Insurance.** Schedule 2.33 contains a true and correct list and description (including insurer, coverages, deductibles, limitations, and expiration dates) of all material insurance policies (including without limitation, fire and casualty, general liability, theft, life, workers' compensation, managers and officers errors and omissions, and business interruption) that are maintained by Xennex or that name Xennex as an insured (or loss payee), including without limitation those that pertain to the assets or operations of Xennex. All such policies are in full force and effect. No material claim is outstanding by Xennex under any policy of insurance and there are no circumstances likely to give rise to such a claim. Nothing has been done or omitted, or has occurred, which could make a policy of insurance taken out by Xennex void or voidable or is likely to result in an increase in premium.

2.34 **Banking and Finance.** Xennex does not have any bank account (whether in credit or overdrawn) other than its bank accounts at the banks disclosed in Schedule 2.34 and its Financial Statements, and there have been no payments out of or drawings against the said accounts since December 31, 2011, except for payment in the ordinary and proper course of business and distributions for all prior years up to and including the year ended December 31, 2011. Xennex does not have any liabilities in the nature of borrowings, or in respect of debentures or negotiable instruments, other than cheques drawn in the ordinary course of business on the aforementioned bank accounts, and other than as disclosed in the Financial Statements. Xennex is not a party to any loan agreement, facility letter, or other agreement for the provision of credit or financing facilities or any agreement for the sale, factoring, or discounting of debts.

2.35 **Insolvency.** No order, nor any petition, other application, or resolution has been made, presented, or passed; nor has any meeting convened for the winding-up, judicial management, administration, or receivership of Xennex been called or taken place; nor are there any grounds on which any person would be entitled to have Xennex wound up or placed under judicial management, administration, or receivership; nor has any person threatened to present such a petition, or convened or threatened to convene a meeting of Xennex to consider a resolution, to wind up Xennex or any other resolutions; nor has any such step been taken in relation to Xennex under the law relating to insolvency or the relief of debtors. No receiver, judicial manager, or any other person in similar capacity (including, where relevant, an administrative receiver and manager) has been appointed over the whole or any part of any of the property, assets, and/or undertaking of Xennex; and there are no grounds on which a petition or an application could be based for the appointment of such a receiver. No composition in satisfaction of the debts of Xennex, scheme of arrangement of its affairs, or compromise or arrangement between Xennex and its respective creditors, has been proposed, sanctioned, or approved. No distress, distraint, charging order, garnishee order, execution, or any other process has been levied or applied for in respect of the whole or any part of any of the property, assets, and/or undertaking of Xennex. Save as disclosed in the Financial Statements, no material event, or intervention or notice by any third party has occurred, that has caused or may cause, any floating charge created by Xennex to vest or to become enforceable, nor has any such vesting occurred or such enforcement been processed/pursued. None of Xennex has been a party to any transaction with any third party which, in the event of any such third party going into liquidation, bankruptcy, or related process, would cause any such transaction to be set aside or be voidable at the option of any person.

2.36 **Contracts, Commitments and Arrangements with Connected Person, etc.** Except as disclosed on Schedule 2.36, there are no existing contracts or arrangements to which Xennex is a party or in which any of the Xennex Stockholders or directors of Xennex, and/or any person connected with, Xennex or any of the Xennex Stockholders is interested, whether directly or indirectly. Except as disclosed on Schedule 2.36, there shall not be outstanding on Closing any material contracts, agreement, arrangements, or understandings (which are legally binding) between Xennex and any Xennex Stockholder, or any person connected with any such person, relating to (a) the management of the business of Xennex, (b) the ownership or transfer of ownership of the assets or capital stock of Xennex, or (c) the provision, supply, purchase, lease, license, or finance of goods, services, Intellectual Property, real property, or the Facilities, or any part thereof, to or by Xennex.

2.37 **Powers of Attorney/Authority.** Except for the powers of attorney granted to patent agents for the conduct of patent matters, Xennex has not given a power of attorney or any other authority (express, implied, or ostensible), other than BioScene Informatics, Inc. which is still outstanding or effective to any person to enter into any contract, commitment, or obligation, or to do anything on Xennex's behalf, other than any authority to current employees to enter into routine trading contracts in the normal course of their duties.

2.38 **Maintenance of Records.** The statutory books, books of account, and other records of whatsoever kind of Xennex are in all material respects up-to-date and maintained in accordance with all applicable legal requirements, and contain in all material respects complete and accurate records of all matters required to be dealt with in such books; all such books and records, and all other documents (including documents of title and copies of all subsisting agreements to which Xennex is a party), which are the property of Xennex, or ought to be in its possession are in its possession or under its control; and no notice or allegation that any is incorrect or should be rectified has been received.

2.39 **Filing of Financing Statements.** All financing statements with respect to any charges, pledges, liens, mortgages, security interests, or other liens by or in favor of Xennex have (if appropriate) been filed, recorded, or registered in accordance with the provisions of all applicable laws, comply with the necessary formalities as to filing, recording, registration, or otherwise have complied with the laws and formalities of any other relevant jurisdiction. The description of collateral or secured property in such documents are complete and accurate in all respects.

2.40 **Warranties and Indemnities.** Xennex has not, or at any time prior to Closing will not have, sold or otherwise disposed of any property, assets, and/or undertakings (other than inventory, trading stock, or other products sold, or services provided, in the ordinary course of business) in circumstances such that Xennex is, or may be, still subject to any liability (whether contingent or otherwise) under any representation, warranty, or indemnity given or agreed to be given (other than representation, warranty, or indemnity given or agreed to be given in respect of inventory or trading stock, or services provided in the ordinary course of business) on or in connection with such sale or disposal.

2.41 **Joint Ventures, Partnerships, etc.** Xennex is not, and has not agreed to become, a member of any joint venture, consortium, partnership, or other unincorporated association (other than a recognized trade association). Xennex is not, and has not agreed to become, a party to any agreement or arrangement of participating with others in any business sharing commissions or other income other than those listed on Schedule 2.41.

2.42 **Sufficiency of Cash on Hand.** At Closing, Xennex will have an amount of cash on hand not less than the sum of all accrued but unpaid liabilities of Xennex as of the Closing Date plus cash held by Xennex on account of pre-paid subscriptions and advertising for periods after the Closing Date.

ARTICLE 3 REPRESENTATIONS AND WARRANTIES OF BIOTIME AND LIFEMAP

BioTime and LifeMap make the Article 3 Warranties for the benefit and reliance of Xennex and the Xennex Stockholders. The Article 3 Warranties are true and correct in all material respects on the date of this Agreement, and are qualified accordingly. Except in furtherance of the consummation of the Merger, neither BioTime nor LifeMap will take any action, or omit or fail to take any act, in any manner within its control, that would cause any of the Article 3 Warranties to be untrue in any material respect as of the Closing Date. BioTime and LifeMap hereby jointly and severally represent and warrant as follows:

3.1 **Organization.** Each of BioTime and LifeMap is a corporation duly organized, validly existing and in good standing under the laws of the state of its incorporation, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. BioTime and LifeMap are duly qualified to conduct their business and are in good standing as a foreign corporation in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary.

3.2 **Authority; Enforceability.** Each of BioTime and LifeMap has the corporate power and authority to execute and deliver, and to perform all of its obligations under, this Agreement. The execution and delivery of this Agreement, and the performance by BioTime and LifeMap of their respective obligations under this Agreement, have been duly authorized by all necessary action on the part of the Boards of Directors of BioTime and LifeMap. This Agreement is the valid and binding agreement of BioTime or LifeMap, enforceable in accordance with its terms, except to the extent limited by any bankruptcy, insolvency, or similar law affecting the rights of creditors generally. BioTime is the sole shareholder of LifeMap, and as such sole shareholder, BioTime has approved the entering into by LifeMap of this Agreement and the Merger contemplated hereby.

3.3 **No Conflict.** The execution and delivery of this Agreement, and consummation of the transactions contemplated hereunder and thereunder, by BioTime and LifeMap do not and will not violate any provisions of (i) any federal or state rule, regulation, statute, or law applicable to BioTime or LifeMap or (ii) the terms of any order, writ, or decree of any federal or state court or judicial or regulatory authority or body by which BioTime or LifeMap is bound, or (iii) the articles of incorporation or bylaws of BioTime or LifeMap.

3.4 **Validity of BioTime Shares and LifeMap Shares.** The BioTime Shares and the LifeMap Shares, when delivered at Closing or from the Escrow, will be duly authorized and validly issued, fully paid, and nonassessable.

3.5 **Litigation.** There is no action, proceeding, or investigation pending, or any basis therefor or threat thereof, which challenges BioTime's or Life Map's right to enter into this Agreement, or challenges any action taken or to be taken, by BioTime or LifeMap in connection with this Agreement.

3.6 **SEC Documents; Financial Statements.** BioTime has filed all reports required to be filed by it under the Securities Exchange Act of 1934, as amended (the Exchange Act), including pursuant to Section 13(a) or 15(d) thereof, during the two (2) years prior to the date hereof (the foregoing materials being collectively referred to herein as the SEC Reports). None of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. The financial statements of BioTime included in the SEC Reports have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved, except as may be otherwise specified in such financial statements or the notes thereto, and fairly present in all material respects the financial position of BioTime as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.

3.7 **Absence of Certain Changes.** Since December 31, 2011, except as specifically disclosed in the SEC Reports, (i) there has not been any material adverse change in the financial condition, assets, liabilities, revenues, or business of BioTime, (ii) BioTime has not incurred any liabilities (contingent or otherwise) other than (A) trade payables, accrued expenses, licensing fees and similar expenses, and other liabilities incurred in the ordinary course of business consistent with past practice, and (B) liabilities not required to be reflected in BioTime's financial statements pursuant to GAAP or not required to be disclosed in filings made with the Securities and Exchange Commission, (iii) BioTime has not altered its method of accounting or the identity of its auditors, and (iv) BioTime has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed, or made any agreements to purchase or redeem any shares of its capital stock.

3.8 **Listing and Maintenance Requirements.** BioTime has not, in the 12 months preceding the date hereof, received notice from the NYSE Amex to the effect that BioTime is not in compliance with the listing or maintenance requirements of the NYSE Amex.

3.9 **Taxes.** BioTime has filed when due all federal, state, and local income tax returns, and all other returns with respect to taxes which are required to be filed with the appropriate authorities of the jurisdictions where business is transacted by BioTime, or where BioTime owns any property, and any taxes due, as reflected on such tax returns, have been paid.

ARTICLE 4 CLOSING

4.1 **Documents Delivered By Xennex.** The obligations of BioTime and LifeMap hereunder to consummate the Merger are subject to and conditioned upon the delivery by Xennex of originals of the following documents, on or before the Closing:

(a) **Merger Certificate.** An original of the California Merger Certificate duly executed by Xennex in conformity with Sec.173 and Sec.1103 of the California Code, and an original of the Massachusetts Merger Certificate duly executed by Xennex in conformity with Massachusetts General Law, Chapter 156D.

(b) **Officers' Certificate.** (i) A certified, true copy of the resolutions of the board of directors of Xennex authorizing and approving the execution and delivery of this Agreement and the consummation of the Merger, certified by the duly elected and incumbent corporate secretary of Xennex; (ii) a certificate signed by the duly elected and incumbent officers of Xennex, dated the Closing Date, attesting to such incumbency and as to the veracity of their signatures; and (iii) a certificate executed by the Chief Executive Officer of Xennex, dated the Closing Date, certifying that the conditions set forth in Section 4.3, other than 4.3(h) and 4.3(i), have been satisfied.

(c) **Good Standing Certificates.** A certificate from the Secretary of State of Massachusetts, dated not earlier than ten days prior to the Closing Date, attesting to the good standing of Xennex as a Massachusetts corporation.

(d) **Shareholder List.** A list showing the name and address of each holder of Xennex Shares and the number of Xennex Shares of each class and series held by each of them as of the Closing Date. In the event that the Closing Date shall be a date other than the Effective Date, and if any transfer of Xennex Shares is registered in the books and records of Xennex after the Closing Date, Xennex shall promptly, after the Effective Date, provide BioTime and LifeMap with an amended list showing the name and address of each holder of Xennex Shares and the number of Xennex Shares of each class and series held by each of them as of the Effective Date.

(e) **Opinion of Counsel.** An opinion of counsel from Truelove, Dee & Chase, LLP, counsel to Xennex, in form and substance of that attached as Exhibit F.

(f) **Assignment of Research Agreements.** An Assignment of Research & License Agreements, in the form attached as Exhibit G (**Assignment Agreement**), duly executed by Xennex, the Xennex Stockholders, and Yeda Research and Development Company, Ltd. (**Yeda**) pursuant to which Yeda will consent to the assignment of the R&L Agreements (as defined in the Assignment Agreement) to LifeMap through the Merger.

(g) **Amendment of R&L Agreements.** An amendment of the R&L Agreements, in the form of Exhibit H, duly executed by Yeda and Xennex, permitting BioTime to make such disclosures concerning the R&L Agreements as it determines to be necessary under applicable Federal, state, and foreign securities laws and the rules and regulations of any securities exchange on which BioTime shares trade.

(h) **Shareholders' Agreement.** A counterpart of the Right of First Refusal and Shareholders Agreement in form attached as Exhibit I (**Shareholders Agreement**) duly executed by each Xennex Stockholder and Yeda.

(i) **Escrow Agreement.** Two counterparts of the Escrow Agreement, duly executed by Xennex, the Xennex Stockholders, and by Kenneth Elsner as the Representative of the Xennex Stockholders. The Escrow Agreement so executed shall be accompanied by stock transfer powers with respect to the BioTime Shares and LifeMap Shares held in escrow, and power of attorney appointing the Representative, signed by each Xennex Stockholder.

(j) **Stock Certificates; Stock Transfer Powers.** Letters of transmittal, in a form to be provided by BioTime, signed by each Xennex Stockholder instructing BioTime (and its transfer agent) and LifeMap to issue and deliver to the Xennex Stockholder the number of BioTime Shares and LifeMap Shares into which their Xennex stock is converted upon consummation of the Merger, less the number of BioTime Shares and LifeMap Shares to be delivered to Yeda as provided in Section 5.1 and the Assignment Agreement, and accompanied by (i) all of the stock certificates evidencing their shares of Xennex common stock, and (ii) irrevocable stock transfer powers, in form and substance acceptable to BioTime (and its transfer agent) and LifeMap, duly executed by the Xennex Stockholders instructing BioTime (and its transfer agent) and LifeMap to transfer BioTime Shares and LifeMap Shares (which shall exclude Escrow Shares) to Yeda as provided in Section 5.1 and the Assignment Agreement.

(k) **Cash Balances; Liabilities.** A list of all the outstanding and unpaid debts, liabilities, and obligations owing by Xennex to creditors and third parties as at three Business Days before the Closing Date, other than future rent obligations arising under the Lease and obligations incurred in the ordinary course of business of Xennex after January 31, 2012.

4.2 **Documents Delivered By LifeMap and BioTime.** The obligations of Xennex hereunder to consummate the Merger are subject to and conditioned upon the delivery by LifeMap and BioTime, as applicable, of originals of the following documents, on or before the Closing:

(a) **Certificates of Merger.** One counterpart for each of the following, duly executed by LifeMap and BioTime: (i) Massachusetts Merger Certificate; and (ii) California Merger Certificate.

(b) **BioTime's Secretary's Certificates.** (i) A certified, true copy of the resolutions of the board of directors of BioTime authorizing and approving the execution and delivery of this Agreement (including the issuance of the BioTime Shares upon the consummation of the Merger), certified by the duly elected and incumbent corporate secretary of BioTime; (ii) a certificate signed by the duly elected and incumbent officers of BioTime, dated the Closing Date, attesting to such incumbency and as to the veracity of their signatures; and (iii) a certificate executed by the Chief Executive Officer of BioTime, dated the Closing Date, certifying that the conditions set forth in Section 4.4, other than Section 4.4(e) insofar as it relates to the Xennex Stockholder approval, have been satisfied.

(c) **Good Standing Certificates.** Certificate from the Secretary of State of California, each dated not earlier than ten days prior to the Closing Date, attesting to the good standing of BioTime and of LifeMap as California corporations.

(d) **LifeMap's Secretary's Certificates.** (i) A certified, true copy of the resolutions of the board of directors of LifeMap authorizing and approving the execution and delivery of this Agreement and the consummation of the Merger, certified by the duly elected and incumbent corporate secretary of LifeMap; (ii) a certificate signed by the duly elected and incumbent officers of LifeMap, dated the Closing Date, attesting to such incumbency and as to the veracity of their signatures; and (iii) a certificate executed by the Chief Executive Officer of LifeMap, dated the Closing Date, certifying that the conditions set forth in Section 4.4, other than Section 4.4(e) insofar as it relates to the Xennex Stockholder approval, have been satisfied.

(e) **Escrow Agreement.** Two counterparts of the Escrow Agreement, duly executed by LifeMap and the Escrow Agent.

(f) **Opinion of Counsel.** An opinion of counsel from Thompson, Welch, Soroko & Gilbert, LLP, counsel to BioTime, in form and substance of that attached as Exhibit J.

(g) **Assignment Agreement.** A counterpart of the Assignment Agreement duly executed by BioTime.

4.3 **Conditions to LifeMap's and BioTime's Obligation to Close.** The obligations of LifeMap and BioTime hereunder to consummate the Merger are subject to the satisfaction of the following conditions on or before the Closing Date.

(a) **Xennex Stockholder Approval.** The Xennex Stockholders shall approve to the Merger pursuant to this Agreement by the vote at the Meeting or by written consent as required by the Massachusetts Law and the Certificate of Incorporation of Xennex. No Xennex Shares shall qualify as Dissenting Shares.

- (b) **Third Party Approval.** Xennex shall have obtained, subject only to consummation of the Merger, all approvals or waivers necessary for Xennex to validly assign the Material Contracts and Licenses to LifeMap upon the Effective Date.
- (c) **Delivery of Documents.** LifeMap and BioTime shall have received all of the documents required to be delivered to LifeMap and BioTime, respectively, under Section 4.1.
- (d) **Filing of Certificates of Merger.** Xennex shall have filed the Massachusetts Merger Certificate with the Massachusetts Secretary of State.
- (e) **Representations and Warranties.** The Article 2 Warranties shall be true and correct in all material respects on and as of the Closing Date (or if made as of a specific date, at and as of such date) with the same effect as though such representations and warranties had originally been made as of the Closing.
- (f) **Performance.** Xennex and the Xennex Stockholders shall have performed and complied, in all material respects, with all agreements, obligations, and conditions that they are required to perform or comply with under this Agreement, on or before the Closing Date.
- (g) **Lawsuits.** No lawsuit, proceeding, or investigation shall have been commenced by any governmental authority on any grounds to restrain, enjoin, or hinder the consummation of the transactions contemplated by this Agreement.
- (h) **Listing Approval.** The NYSE Amex shall have approved the listing of the BioTime Shares on a when issued basis.
- (i) **Compliance with Securities Laws.** The sale and issuance of the BioTime Shares and LifeMap Shares shall be (a) exempt from registration under the Securities Act, and (b) exempt from registration, qualification, or other regulation under the laws of any state of the United States and any country in which any Xennex Stockholder resides.
- (j) **Employment Agreements.** The employees of Xennex listed on Schedule 4.3(j) shall have executed and delivered to LifeMap employment agreements in substantially the forms set forth on Exhibit K attached hereto and reflecting the compensation and other terms set forth in offer letters from LifeMap with regard to their employment with LifeMap following the Closing in the respective positions therein provided, and the same shall not have been revoked, withdrawn, or amended.
- (k) the LifeMap 2011 Stock Option Plan shall be amended to reduce the number of shares of LifeMap common stock (on a post one-for-four reverse split basis) to 571,428 shares, with a corresponding reduction in the number of options granted or authorized by the LifeMap board of directors, and each employee, consultant, and director of LifeMap to whom any stock options were granted or offered shall sign a written consent, in form and substance satisfactory to LifeMap and BioTime, to such reduction in the number of options so granted or offered to them.

(l) The consulting agreement between Xennex and DWLS Consulting, Inc., and the consulting agreement between Xennex and Mind Trickle Solutions, Inc. shall have been terminated effective on the Closing Date without any obligation on the part of Xennex to pay any fee or other consideration as a result of the termination of such consulting agreements or as a result of the Merger, and Xennex and the Xennex Stockholders shall have provided evidence to such effect satisfactory to BioTime and LifeMap.

4.4 **Conditions to Xennex's Obligation to Close.** The obligations of Xennex hereunder to consummate the Merger are subject to the satisfaction of the following conditions on or before the Closing Date.

(a) **Delivery of Documents.** BioTime and LifeMap shall have delivered all of the documents required to be delivered under Section 4.2 to Xennex.

(b) **Filing of Certificate of Merger.** LifeMap shall have filed (or made adequate arrangements for the filing of) the California Merger Certificate with the Secretary of State of the State of California.

(c) **Representations and Warranties.** The Article 3 Warranties shall be true and correct in all material respects on and as of the Closing Date (or if made as of a specific date, at and as of such date) with the same effect as though such representations and warranties had originally been made as of the Closing.

(d) **Performance.** LifeMap and BioTime shall have performed and complied, in all material respects, with all agreements, obligations, and conditions that it is required to perform or comply with, on or before the Closing Date.

(e) **Shareholder Approval.** The shareholder(s) of LifeMap and the shareholders of Xennex shall have each approved of the Merger.

(f) **Listing Approval.** The NYSE Amex shall have approved the listing of the BioTime Shares on a when issued basis.

4.5 **Commercially Reasonable Efforts.** From the date of this Agreement to the Closing, each Party shall use commercially reasonable efforts to take, or cause to be taken, all actions and to do, or cause to be done, and to assist and cooperate with the other Parties in doing, all things, in each case necessary or advisable to permit the consummation of the Merger and the other transactions contemplated hereby, including (i) obtaining any consents, authorizations, Shareholder Questionnaires, approvals, permits, licenses, or governmental authorizations, estoppel certificates and filings under any applicable Law required to be obtained or made by either of them which may be necessary or appropriate to permit the consummation of the Merger and the other transactions contemplated hereby, (ii) ensuring that its representations and warranties remain true and correct in all material respects through the Closing Date and (iii) ensuring that the conditions to the obligations of the other Parties to consummate the Merger are satisfied. In the event that the Merger is not consummated, the Xennex stock certificates delivered to BioTime and LifeMap pursuant to Section 4.1(j) shall be returned to the Xennex Stockholders.

ARTICLE 5
ADDITIONAL COVENANTS

5.1 **Yeda Assignment Agreement and Consent.** Under the terms of the R&L Agreements the Merger will constitute an assignment of the R&L Agreements requiring the prior written approval of Yeda. Conditioned upon the receipt of the Assignment Agreement duly executed by Yeda, pursuant to which Yeda shall consent to the assignment of the R&L Agreements to LifeMap through the Merger, BioTime and LifeMap consent to the transfer of [*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission] BioTime Shares and [*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission] LifeMap Shares by Xennex Stockholders to Yeda as consideration for Yeda's consent to the assignment of the R&L Agreements to LifeMap through the Merger; provided, that (a) Yeda executes and delivers to BioTime and LifeMap an investment representation letter, in form and content acceptable to BioTime and LifeMap, containing representations, warranties, and agreements concerning Yeda's investment intent with respect to such BioTime Shares and Yeda Shares and the applicable restrictions on transfer under the Securities Act and applicable state and foreign securities laws, (b) the stock certificates evidencing such BioTime Shares and LifeMap Shares shall bear such legends as BioTime and LifeMap may require pertaining to restrictions on transfer under the Securities Act and applicable state and foreign securities laws, and (c) Yeda executes and delivers to LifeMap a counterpart of the Shareholders Agreement.

5.2 **Additional LifeMap Shares.** Xennex and the Xennex Stockholders and LifeMap acknowledge and agree that in consideration for BioTime issuing the BioTime Shares, having an agreed market value of \$2,000,000, as part of the Merger Consideration to enable LifeMap to acquire Xennex in the Merger, immediately following the consummation of the Merger LifeMap shall issue to BioTime 1,142,857 fully paid and non-assessable shares of LifeMap common stock.

5.3 **LifeMap Stock Option Plan.** Prior to the consummation of the Merger, the LifeMap 2011 Stock Option Plan (the Plan) shall be amended to reduce the number of shares of LifeMap common stock (on a post one-for-four reverse split basis) to 571,428 shares, with a corresponding reduction in the number of options granted or authorized by the LifeMap board of directors. Following the consummation of the Merger, the Plan shall be further amended to add an additional 1,271,041 shares of LifeMap common stock (on a post one-for-four reverse split basis) to the Plan so that the Plan will include, in the aggregate, 1,842,469 shares of LifeMap common stock, as adjusted for the one-for-four reverse stock split. The Xennex Stockholders agree to vote all of their LifeMap Shares (whether at a meeting of LifeMap shareholders or by written consent in lieu of a meeting) for approval of the amendment to the Plan.

5.4 **Further Assurances.** Xennex will execute, acknowledge, deliver, file, and record such additional certificates, deeds, instruments, notices, and documents; and will take such additional actions as BioTime and LifeMap may reasonably request on or after the date of this Agreement to effect, complete, or perfect the Merger and the vesting of title of the assets of Xennex in LifeMap. LifeMap and BioTime will each execute, acknowledge, deliver, file, and record such additional certificates, instruments, notices, and documents; and will take such additional actions as Xennex may reasonably request on or after the date of this Agreement to effect, complete, or perfect the Merger, and the issuance of the BioTime Shares and LifeMap Shares to the Xennex Stockholders.

5.5 **Confidentiality.** Xennex agrees that it will not disclose to any person or entity (other than the officers and directors of LifeMap or BioTime) for any reason, or otherwise use, any Confidential Information which Xennex may have acquired with respect to the business of LifeMap or BioTime prior to or after the date of this Agreement, without the prior written consent of BioTime and LifeMap. LifeMap and BioTime agree that they will not, nor will either of them, disclose to any person or entity (other than the officers and directors of Xennex) for any reason, or otherwise use, any Confidential Information which LifeMap or BioTime may have acquired with respect to the business of Xennex prior to or after the date of this Agreement but prior to the Merger, without the prior written consent of Xennex. Confidential Information means all information that includes or pertains to: (a) the formulation, composition, or methods of manufacture of any product; (b) the results of any research, testing, or evaluation of any product or technology (including, without limitation, non-public regulatory agency data, pre-clinical and clinical data, medicinal chemistry, test, and analysis results, and other technical information); (c) formulae, processes, the content of Patent Applications, know-how, ideas, unpatented inventions, and research protocols; (d) research and development plans and programs; (e) business methods and strategies; (f) business planning, marketing plans, and customer lists; (g) accounting, income tax, and financial information; (h) the terms of contracts and licenses, proposed contracts, licenses, and other business arrangements with third parties; and (i) information concerning the compensation of employees and consultants. This restriction shall continue to apply for three years after Closing but shall not apply to any Confidential Information which was or is:

- (a) already, or may hereafter be, in the public domain other than arising from a breach of this Section 5.5;
- (b) lawfully obtained by the Party receiving the Confidential Information from a third party, where the third party was not known, or was not reasonably thought to be known, to such receiving party to be bound by any obligation to the other Party to maintain the confidentiality of such information;
- (c) required by any laws, rules, or regulations or by any governmental or statutory authority, agency, regulatory body, or its equivalent (including any relevant stock exchange or tax authorities which may be applicable to it and/or its related corporations) or by a court of competent jurisdiction to be disclosed provided that in such event, the relevant Party shall (and shall procure that its relevant related corporations shall) forthwith consult with the other Parties on the form and content of the announcement or the disclosure (as the case may be) prior to making the announcement or disclosure (as the case may be); or
- (d) disclosed to the professional advisers of the respective Parties;
- (e) required to be disclosed or used to vest the full benefit of this Agreement in Xennex or LifeMap.

5.6 **Public Announcements.** Except as may be required to be disclosed pursuant to applicable law, Xennex agrees that prior to Closing it will not make any announcement in connection with this Agreement or disclose the terms of this Agreement to anyone other than its officers, directors, shareholders, attorneys, accountants and parties to Material Contracts or Licenses whose consent to the assignment of the Material Contract or License through the Merger is required or reasonably necessary, unless BioTime and LifeMap shall have given their prior written consent to such announcement or disclosure. In the case of any proposed announcement or disclosure to persons other than those described in the immediately preceding sentence, Xennex shall provide BioTime and LifeMap with a copy of the proposed announcement or disclosure not less than ten (10) days prior to the date that Xennex proposes to make the announcement or disclosure. Xennex represents and warrants to BioTime and LifeMap that Xennex is not presently subject to any law, regulation, or judicial order requiring it to make any public announcement or disclosure of this Agreement or the Merger.

5.7 **Federal Income Tax Treatment of Merger** Each of the BioTime, LifeMap, and Xennex shall use its or their commercially reasonable efforts to cause the Merger to constitute a "reorganization" within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended (the Code), for federal income tax purposes. None of the aforementioned parties has taken or will, either before or after consummation of the Merger, take any action which, to the knowledge of such party, would cause, nor will any of the aforementioned parties fail to perform, or otherwise breach, this Agreement in any way which would cause, or in either case result in, the Merger to fail to constitute a reorganization under Section 368(a). Unless otherwise required by Law, each party shall (i) report the Merger on all Tax Returns and filings as a reorganization under Section 368(a), and (ii) not take any position or action that is inconsistent with the characteristics of the Merger as a reorganization under Section 368(a) in any audit, administrative proceeding, litigation or otherwise.

5.8 **Cash Proration.** Cash held by Xennex immediately prior to the Closing Date shall be prorated and allocated between Xennex and LifeMap. An amount of Xennex cash on hand equal to the sum of all accrued but unpaid liabilities of Xennex as of the Closing Date plus cash held by Xennex on account of pre-paid subscriptions and advertising for periods after the Closing Date shall be allocated and paid to LifeMap at Closing, and any remaining Xennex cash on hand after the allocation and payment to LifeMap shall be allocated to and paid to the Xennex Stockholders as soon as practicable after the Closing Date based upon a final accounting of Xennex liabilities and pre-paid subscriptions and advertising.

ARTICLE 6. MISCELLANEOUS

6.1 **Governing Law.** This Agreement shall be construed and governed in all respects by the laws of the state of California without regard to principles of conflicts of laws.

6.2 **Service of Process in Massachusetts.** LifeMap agrees that it may be served with process in the Commonwealth of Massachusetts in any proceeding for enforcement of any obligation of Xennex, as well as for enforcement of any obligation of LifeMap arising from the Merger, including any suit or other proceeding to enforce the right of any Dissenting Shareholder as determined in appraisal proceedings pursuant to Massachusetts General Law, Chapter 156D, Sec.13.. LifeMap irrevocably appoints the Secretary of State of Massachusetts as its agent to accept service of process in any such suit or other proceedings. A copy of such process shall be mailed by the Secretary of State of Massachusetts to LifeMap at the address shown in Section 6.5 for the delivery of notices to LifeMap.

6.3 **Successors and Assigns.** The provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, permitted assigns, heirs, executors, and administrators of each Party to this Agreement; provided, that no Party may assign its rights or obligations under this Agreement without the express prior written consent of the other Parties.

6.4 **Entire Agreement; Termination; Amendment.**

(a) This Agreement constitutes the full and entire understanding and agreement among the Parties with regard to the subject matter of this Agreement at the date of this Agreement, to the exclusion of any terms implied by law which may be excluded by contract, and supersedes any previous written or oral agreement among Xennex, BioTime, and LifeMap in relation to the Merger. This Agreement and any term of this Agreement may be amended, waived, discharged, or terminated only by a written instrument signed by the Parties.

(b) At any time prior to the Effective Date, this Agreement may be terminated:

(i) by the written consent of Xennex, BioTime, and LifeMap;

(ii) by any of BioTime, LifeMap or Xennex if the Merger has not been consummated by May 18, 2012; provided that the right of a Party to terminate this Agreement pursuant to this clause shall not be available to any Party whose breach of any obligation under this Agreement has been the cause of, or resulted in, the failure of the Merger to be consummated by such date;

(iii) by BioTime or LifeMap, if Xennex or any Xennex Stockholder shall have breached in any material respect any of its or his representations, warranties or covenants contained in this Agreement, which breach of failure to perform (i) would give rise to a failure of a condition set forth in Section 4.3(e) or Section 4.3(f) and (ii) has not been cured by Xennex or the Xennex Stockholder within 20 Business Days after the giving of written notice thereof from BioTime or LifeMap; or

(iv) by Xennex, if BioTime or LifeMap has breached in any material respect any of their respective representations, warranties, or covenants contained in this Agreement, which breach of failure to perform (i) would give rise to a failure of a condition set forth in Section 4.4(c), 4.4(d) or 4.4(e) and (ii) has not been cured within 20 Business Days after the giving of written notice thereof from Xennex.

(c) The Parties, upon and with the approval of their respective boards of directors, may amend this Agreement at any time prior to the Effective Date, provided that an amendment made subsequent to the adoption of this Agreement by the stockholders of any Party shall not (i) alter or change the amount or kind of BioTime Shares, LifeMap Shares, or cash in lieu of fractional BioTime Shares or fractional LifeMap Shares to be received on conversion of all or any of the Xennex Shares in the Merger, (ii) alter or change any term of the articles of incorporation of LifeMap as the surviving corporation to be effected by the Merger, or (iii) alter or change any of the terms and conditions of this Agreement if such alteration or change would adversely affect the rights of the Xennex Stockholder, unless such amendment is approved by a vote or written consent of the Xennex Stockholders on the same basis as may have been required to approve this Agreement prior to such amendment.

6.5 **Notices, etc.** All notices and other communications required or permitted to be given pursuant to this Agreement shall be in writing and shall be deemed given when delivered by hand, messenger, or next business day air freight service, in any case addressed as follows:

To BioTime: BioTime, Inc.
1301 Harbor Bay Parkway, Suite 100
Alameda, California 94502
Attention: Michael D. West, President

with a copy to: Richard S. Soroko, Esq.
Thompson, Welch, Soroko & Gilbert LLP
235 Pine Street
13th Floor
San Francisco, California 94104

To LifeMap: LifeMap Sciences, Inc.
1301 Harbor Bay Parkway, Suite 100
Alameda, California 94502
Attention: Michael D. West, President

with a copy to: Richard S. Soroko, Esq.
Thompson, Welch, Soroko & Gilbert LLP
235 Pine Street
13th Floor
San Francisco, California 94104

To Xennex: Xennex, Inc.
1020 Plain Street, Suite 290
Marshfield, MA 02050
Attn: David Warshawsky, President

with a copy to: Kenneth Elsner, Esq.
1020 Plain Street, Suite 290
Marshfield, MA
02050

Any Party may change its address for the purpose of this Section by giving notice to each other Party in accordance with this Section.

6.6 **Delays and Omissions.** No delay or omission to exercise any right, power, or remedy accruing to any Party to this Agreement, upon any breach or default of any other Party under this Agreement, shall impair any such right, power, or remedy of such Party, nor shall such delay or omission be construed to be a waiver of, or an acquiescence in, any such breach or default or any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent, or approval of any kind or character on the part of any Party of any breach or default under this Agreement, or any waiver on the part of any Party of any provisions or conditions of this Agreement, must be made in writing, as provided in Section 6.4, and shall be effective only to the extent specifically set forth in such writing.

6.7 **Expenses.** Each Party shall bear their own expenses incurred on their behalf with respect to this Agreement and to the transactions contemplated by this Agreement.

6.8 **No Brokers or Finders Fees.** Xennex and the Xennex Stockholders warrant to BioTime and LifeMap that no person is entitled to receive any fee, commission, or other compensation from Xennex or any Xennex Stockholder, as a broker, finder, or otherwise, in connection with the execution and delivery of this Agreement or the consummation of the Merger.

6.9 **Titles and Subtitles.** The titles or headings of the Articles and Sections of this Agreement are for convenience of reference only and are not to be considered in construing this Agreement.

6.10 **Schedules and Exhibits.** References to Schedules and Exhibits are references to the Schedules and Exhibits attached to this Agreement. All Schedules are an integral part of the transactions effected by or under this Agreement.

6.11 **Severability.** If one or more provisions of this Agreement are held to be unenforceable under applicable law, each such unenforceable provision shall be excluded from this Agreement and the balance of this Agreement shall be interpreted as if each such unenforceable provision were so excluded; the balance of this Agreement as so interpreted shall be enforceable in accordance with its terms.

6.12 **Time of the Essence.** Time shall be of the essence of this Agreement both as regards any dates and periods mentioned and as regards any dates and periods which may be substituted for them in accordance with this Agreement or by agreement in writing between the Parties.

6.13 **Counterparts.** This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument. Counterparts of this Agreement may be transmitted by facsimile, electronic mail, or other electronic means and, upon receipt, shall be deemed an original; provided that, upon demand of the recipient, the sender shall mail or deliver an originally signed copy within a reasonable time of such demand.

6.14 **Interpretation and Certain Definitions.** In this Agreement, unless the context otherwise requires, the definitions in this Section 6.14 apply throughout this Agreement:

- (a) The sign \$ means the lawful currency of the United States of America.
- (b) **Article 2 Warranties** means the representations and warranties as set out in Article 2.
- (c) **Article 3 Warranties** means the representations and warranties as set out in Article 3.
- (d) **BioTime Disclosure Documents** means the following reports filed by BioTime with the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended: most recent Annual Report on Form 10-K; definitive proxy statement for BioTime's most recent annual meeting of shareholders; and each Quarterly Reports on Form 10-Q and each Current Report on Form 8-K filed by BioTime after the filing of its most recent Annual Report on Form 10-K.
- (e) **Business Day** means a day on which commercial banks are open for business in San Francisco, California (excluding Saturdays, Sundays and Federal public holidays).
- (f) **California Code** means the California Corporations Code, as in effect during the term of this Agreement.
- (g) **Massachusetts Law** means the Massachusetts General Law, as in effect during the term of this Agreement.
- (h) **Xennex Disclosure Documents** means the following documents (i) a copy of this Agreement, (ii) a summary of the principal terms under which Xennex Shares will be converted into BioTime Shares and LifeMap Shares in the Merger; (iii) the Financial Statements, as defined in Section 2.19, and (iv) a summary of Xennex's business.
- (i) **Xennex Shares** means collectively, all the issued shares of capital stock of Xennex (including the Xennex common stock and each series of Xennex preferred stock).
- (j) **Party** or **Parties** means individually any of LifeMap, BioTime, or Xennex, and collectively all of LifeMap, BioTime and Xennex.
- (k) **Xennex Stockholder** means any holder of record of Xennex Shares.
- (l) **Warranties** means collectively the Article 2 Warranties and the Article 3 Warranties.
- (m) The headings are for convenience only and shall not affect the interpretation of this Agreement.

(n) Unless the context otherwise requires or permits, references to the singular number shall include references to the plural number and vice versa; references to natural persons shall include any company, limited liability partnership, partnership, business trust or unincorporated association (whether or not having separate legal personality); references to a company shall include any company, corporation, or any body corporate, wherever incorporated; and words denoting any gender shall include all genders.

(o) The words “include” or “including” shall be construed as incorporating also “but not limited to” or “without limitation”.

6.15 **Third Party Beneficiaries; Obligations.** This Agreement is for the sole benefit of the Parties and their permitted successors and assigns.

[Signatures on following page]

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the date first above written.

BIOTIME, INC.
a California corporation

XENNEX, INC.
a Massachusetts corporation

By: s/ Robert W. Peabody
Name: Robert W. Peabody
Title: Senior Vice President and Chief Operating Officer

By: s/ Kenneth Elsner
Name: Kenneth Elsner
Title: Chief Financial Officer

By: s/ Judith Segall
Name: Judith Segall
Title: Secretary

By: s/ Kenneth Elsner
Name: Kenneth Elsner
Title: Secretary

LIFEMAP, SCIENCES INC.
a California corporation

XENNEX STOCKHOLDERS:

By: s/ Kenneth Elsner
Name: Kenneth Elsner
Title: Chief Operating Officer

s/ David Warshawsky
David Warshawsky

By: s/ Robert W. Peabody
Name: Robert W. Peabody
Title: Secretary

s/ Kenneth Elsner
Kenneth Elsner

s/ Yaron Guan-Golan
Yaron Guan-Golan

FOR THE PURPOSES OF ARTICLE 1.12 ONLY:

STOCKHOLDER REPRESENTATIVE

s/ Kenneth Elsner
Kenneth Elsner

Schedule 2.3(a)

Schedule of ownership of outstanding shares of Xennex

Schedule 2.3(b)

None

Schedule 2.6

None

Schedule 2.9

None

Schedule 2.10

<u>Domain Name</u>	<u>Created</u>	<u>Registrar</u>
genecards.org	28-Jun-05	GoDaddy.com, Inc.
xennexinc.com	6-Jun-03	GoDaddy.com, Inc.
genecards.net	21-Nov-07	GoDaddy.com, Inc.
geneip.com	25-Mar-09	GoDaddy.com, Inc.
geneip.net	25-Mar-09	GoDaddy.com, Inc.
geneip.org	25-Mar-09	GoDaddy.com, Inc.
malacards.com	5-Feb-09	GoDaddy.com, Inc.
malacards.org	4-Feb-09	GoDaddy.com, Inc.

Schedule 2.11(a)

GeneCards Research and License Agreement

Pandatox Agreement

Schedule 2.11(b)

None

Schedule 2.13

None

Schedule 2.16(a)

Contracts

Rackspace Agreement – Liability over \$10,000

Licenses

List of Licenses

Schedule 2.16(b)

Rackspace Agreement

Schedule 2.16(c)

None

Schedule 2.18

Massachusetts Articles of Incorporation

Schedule 2.20

Schedule showing the sale and licensing of products (including data base information), on a product by product basis to each of Xennex's customers during the twelve months ended December 31, 2011

Schedule 2.22

None

Schedule 2.23

List of the current employees of Xennex and their current salary, bonus entitlements, vacation, sick leave, and other remuneration and benefits

Schedule 2.24

None

Schedule 2.33

List and description (including insurer, coverages, deductibles, limitations, and expiration dates) of all material insurance policies (including without limitation, fire and casualty, general liability, theft, life, workers' compensation, managers and officers errors and omissions, and business interruption) that are maintained by Xennex or that name Xennex as an insured (or loss payee), including without limitation those that pertain to the assets or operations of Xennex

Schedule 2.34

List of bank accounts

Schedule 2.36

List of existing contracts or arrangements to which Xennex is a party or in which any of the Xennex Stockholders or directors of Xennex, and/or any person connected with, Xennex or any of the Xennex Stockholders is interested, whether directly or indirectly

Schedule 2.41

GeneCards Research and License Agreement

Pandatox Agreement

Bioscene Agreement – Commissions based on sales of GeneCards Database to Asian Customers

EXHIBIT A

California Merger Certificate
CERTIFICATE OF APPROVAL
OF
AGREEMENT OF MERGER

Michael D. West and Judith Segall certify that:

1. They are the Chief Executive Officer and Secretary, respectively, of LifeMap Sciences, Inc., a California corporation (the **corporation**).
2. The principal terms of the Agreement of Merger in the form attached were duly approved by the board of directors of the corporation by a vote that equaled or exceeded the vote required.
3. The principal terms of the Agreement of Merger in the form attached were duly approved by the board of directors of BioTime, Inc., a California corporation (the **parent corporation**), the corporation's parent and the party whose shares are being issued in the merger.
4. The principal terms of the Agreement of Merger were entitled to be and were approved by the parent corporation's board alone under the provisions of Section 1201 of the California Corporations Code.

We further declare under penalty of perjury under the laws of the state of California that the matters set forth in this certificate are true and correct of our own knowledge.

Executed at Alameda, California on May ____, 2012.

Michael D. West, Chief Executive Officer

Judith Segall, Secretary

CERTIFICATE OF APPROVAL
OF
AGREEMENT OF MERGER

David Warshawsky and Kenneth Elsner certify that:

1. They are the President and Secretary, respectively, of Xennex, Inc., a Massachusetts corporation (the **corporation**).
2. The principal terms of the Agreement of Merger in the form attached were duly approved by the board of directors.
3. There is only one class of authorized shares, common stock, of which 1,000 shares were issued and outstanding and entitled to vote on the merger.
4. The principal terms of the Agreement of Merger in the form attached were duly approved by a vote of 100% of the shares of each class entitled to vote.

We further declare under penalty of perjury under the laws of the state of California that the matters set forth in this certificate are true and correct of our own knowledge.

Executed at _____, Massachusetts on May ____, 2012.

David Warshawsky, President

Kenneth Elsner, Secretary

Agreement of Merger

This Agreement of Merger is entered into between LifeMap Sciences, Inc., a California corporation (herein “Surviving Corporation”), Xennex, Inc., a Massachusetts corporation (herein “Xennex” or “Merging Corporation”), and BioTime, Inc., a California corporation (herein “BioTime” or “Parent Corporation”).

1. The Merging Corporation shall be merged into the Surviving Corporation (the “Merger”).

2. Upon the consummation of the Merger, the outstanding shares of Xennex common stock shall automatically and by operation of the Merger be converted into shares of Surviving Corporation common stock, no par value (“LifeMap Shares”) and BioTime common shares, no par value (“BioTime Shares”) as follows (the “Merger Consideration”):

(a) The total number of BioTime Shares to be issued to Xennex Stockholders as part of the Merger Consideration, shall be determined by dividing \$2,000,000 by \$4.46 per share which is the weighted average closing price of BioTime Shares as reported on the NYSE Amex for the twenty (20) trading days ending on and including the third trading day immediately preceding the date of this Agreement. The total number of LifeMap Shares to be issued to Xennex Stockholders as part of the Merger Consideration shall be determined by dividing \$2,384,530 by \$1.75, which the Parties agree is the fair market value of one LifeMap Share (as adjusted for the one-for-four reverse stock split to be effected concurrent with the filing of the California Merger Certificate. Accordingly, the number of BioTime Shares to be issued to Xennex Stockholders, collectively, as part of the Merger Consideration shall be 448,430 BioTime Shares; and the number of LifeMap Shares to be issued to Xennex Stockholders as the remainder of the Merger Consideration, shall be 1,362,589 LifeMap Shares.

(b) Each share of Xennex common stock outstanding shall be converted in the Merger into (i) that number of LifeMap Shares determined by dividing (A) the total number of LifeMap Shares to be issued in the Merger by (B) the total number of shares of Xennex common stock issued and outstanding, and (ii) that number of BioTime Shares determined by dividing (A) the total number of BioTime Shares to be issued in the Merger by (B) the total number of shares of Xennex common stock issued and outstanding. Accordingly, the number of BioTime Shares to be issued to Xennex Stockholders, collectively, as part of the Merger Consideration shall be 448,430 BioTime Shares; and the number of LifeMap Shares to be issued to Xennex Stockholders as the remainder of the Merger Consideration, shall be 1,362,589 LifeMap Shares.

(i) Based on the forgoing, and assuming that no additional shares of Xennex common stock, no par value per share (**Xennex Stock**), are issued and no shares of Xennex Stock are redeemed or reacquired by Xennex, upon the consummation of the Merger, each outstanding share of Xennex Stock, shall be converted into 448.43 BioTime Shares and 1,362.589 LifeMap Shares or the right to receive cash in lieu of any fractional share as provided below.

(ii) LifeMap’s obligation to consummate the Merger is conditioned upon no Xennex stockholder having and electing to demand the appraisal of such Xennex Stockholder’s shares under Massachusetts General Law, Chapter 156B.

3. No fractional BioTime Shares or fractional LifeMap Shares shall be issued in the Merger. In determining the number of BioTime Shares and LifeMap Shares to be issued to a Xennex stockholder in the Merger, any fractional BioTime Shares or fractional LifeMap Shares that would otherwise be issuable with respect to the Xennex common stock registered in the name of that Xennex stockholder shall be aggregated into the greatest number of whole BioTime Shares and whole LifeMap Shares as is feasible in each case. In lieu of issuing any fractional BioTime Share remaining after the aforesaid aggregation of fractions, BioTime shall pay the Xennex Stockholder cash in an amount determined by multiplying the remaining aggregate fraction by the average closing price of a BioTime Share as reported on the NYSE Amex for the twenty (20) trading days immediately preceding the date of consummation of the Merger. In lieu of issuing any fractional LifeMap Share remaining after the aforesaid aggregation of fractions, LifeMap shall pay the Xennex Stockholder cash in an amount determined by multiplying the remaining aggregate fraction by \$1.75.

4. The outstanding shares of Surviving Corporation and Parent Corporation shall remain outstanding and are not affected by the Merger.

5. Merging Corporation shall from time to time, as and when requested by Surviving Corporation, execute and deliver all such documents and instruments and take all such action necessary or desirable to evidence or carry out the Merger.

6. The effect of the Merger and the effective date of the Merger are as prescribed by law.

[signatures on following page]

IN WITNESS WHEREOF the parties have executed this Agreement as of May __, 2012.

LifeMap Sciences, Inc.

David Warshawsky, Chief Executive Officer

Kenneth Elsner, Secretary

Xennex, Inc.

David Warshawsky, President

Kenneth Elsner, Secretary

BioTime, Inc.

Michael D. West, Chief Executive Officer

Judith Segall, Secretary

EXHIBIT B

Massachusetts Merger Certificate

The Commonwealth of Massachusetts

William Francis Galvin

Secretary of the Commonwealth

One Ashburton Place, Boston, Massachusetts 02108-1512

FORM MUST BE TYPED

FORM MUST BE TYPED

Articles of Merger
Involving Domestic Corporations,
Foreign Corporations or Foreign Other Entities
(General Laws Chapter 156D, Section 11.06; 950 CMR 113.37)

Exact name, jurisdiction and date of organization of each party to the merger:

Table with 3 columns: (1) EXACT NAME, (2) JURISDICTION, DATE OF ORGANIZATION. Rows include XenneX, Inc. (Massachusetts, March 7, 2003) and LifeMap Sciences, Inc. (California, February 11, 2011).

(3) The foreign corporation or other entity [] is / [x] is not* authorized to conduct business in the Commonwealth.

(4) Exact name of the surviving entity: LifeMap Sciences, Inc.

(5) Jurisdiction under the laws of which the surviving entity will be organized: California

(6) The merger shall be effective at the time and on the date approved by the Division, unless a later effective date not more than 90 days from the date and time of filing is specified:

(7-8) For each domestic corporation that is a party to the merger:**

(check appropriate box)

[x] The plan of merger was duly approved by the shareholders, and where required, by each separate voting group as provided by G.L. Chapter 156D and the articles of organization.

OR

[] The plan of merger did not require the approval of the shareholders.

(9) Participation of each other domestic entity, foreign corporation, or foreign other entity was duly authorized by the law under which the other entity or foreign corporation is organized and by its organizational documents.

* Check appropriate box

** Provide this information for each domestic corporation separately

- (10) Attach any amendment to articles of organization of the surviving entity, where the survivor is a domestic business corporation.
- (11) Attach the articles of organization of the surviving entity, where the survivor is a NEW domestic business corporation, including all the supplemental information required by 950 CMR 113,16.
- (12) State the executive office address of the surviving foreign other entity if such information is not on the public record in the foreign jurisdiction:

(number, street, city or town, state, zip code)

Signed by: _____,
(signature of authorized individual)

- Chairman of the board of directors,
- President,
- Other officer,
- Court-appointed fiduciary,

on this _____ day of _____, _____,

Signed by: _____,
(signature of authorized individual)

- Chairman of the board of directors,
- President,
- Other officer,
- Court-appointed fiduciary,

on this _____ day of _____, _____,

COMMONWEALTH OF MASSACHUSETTS

William Francis Galvin
Secretary of the Commonwealth
One Ashburton Place, Boston, Massachusetts 02108-1512

Articles of Merger Involving Domestic Corporations,
Foreign Corporations or Foreign Other Entities
(General Laws Chapter 156D, Section 11.06; 950 CMR 113.37)

I hereby certify that upon examination of these articles of merger, duly submitted to me, it appears that the provisions of the General Laws relative thereto have been complied with, and I hereby approve said articles; and the filing fee in the amount of \$,_____ having been paid, said articles are deemed to have been filed with me this day of _____ 20 _____ at a.m./p.m.
time

Effective date: _____
(must be within 90 days of date submitted)

WILLIAM FRANCIS GALVIN
Secretary of the Commonwealth

Examiner

Filing fee: Minimum \$250

Name approval

TO BE FILLED IN BY CORPORATION

C

Contact Information:

#A.R.

Kenneth Eisner

1020 Plain Street, Suite 290

Marshfield, MA 02050

Telephone: 781-826-7719

Email: kelsner@xennexinc.com

Upon filing, a copy of this filing will be available at www.sec.state.ma.us/cor. If the document is rejected, a copy of the rejection sheet and rejected document will be available in the rejected queue.

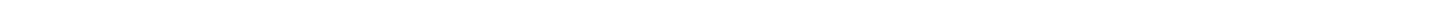


EXHIBIT C

Shareholder Questionnaire

SHAREHOLDER QUESTIONNAIRE

**Merger of Xennex, Inc.
with and into
LifeMap Sciences, Inc.**

INSTRUCTIONS

The information in this Shareholder Questionnaire is requested of each holder of common stock or preferred stock of Xennex, Inc. (“**Xennex**”) in connection with the proposed merger of Xennex with and into LifeMap Sciences, Inc. (“**LifeMap**”), a subsidiary of BioTime, Inc. (“**BioTime**”). In the merger, your Xennex stock will be converted into BioTime common shares, no par value (“**BioTime Shares**”) and shares of common stock of LifeMap (“**LifeMap Shares**”). The offer and sale of the BioTime Shares and LifeMap Shares in the merger has not been registered under the Securities Act of 1933, as amended (the “**Securities Act**”) and instead is being made privately pursuant to the private placement exemption from registration provided in Section 4(2) of the Securities Act and Rule 506 of Regulation D adopted by the Securities and Exchange Commission. The following information is needed to ensure compliance with the requirements of the private placement exemption.

By executing this Shareholder Questionnaire, you (“**Shareholder**”) are certifying, representing, and warranting to BioTime, LifeMap, and Xennex that the information you provide below is true and correct.

The information you provide in this Shareholder Questionnaire will be treated confidentially.

Shareholder Questionnaire

NOTE: If your Xennex stock is jointly owned by two or more persons as joint tenants or tenants-in-common, each person must complete this Shareholder Questionnaire.

1. Identity and Background Information.

- (a) Full name of Shareholder _____
- (b) Check appropriate box:
 - Individual
 - Partnership
 - Corporation
 - Trust
 - Other (indicate): _____
- (c) Provide the following information as to each Shareholder (provide the same information for each joint tenant or tenant-in-common on a separate sheet):
 - Address: _____
 - City: _____
 - State: _____
 - Telephone: () _____
- (d) Citizenship: U.S. Other (specify) _____
- (e) If you hold your Xennex stock as joint tenants or tenants-in-common:
 - (1) List name of each co-owner: _____
 - (2) Indicate relationship, if any, between or among co-owners:

- (f) Please provide the following information if you are a partnership, corporation, trust or other entity:
 - (1) List name of person(s) making investment decisions on behalf of such entity:

 - (2) Date of formation of partnership, corporation or trust and jurisdiction of formation: _____
 - (3) Federal Tax Identification Number (TIN): _____
 - (4) Nature of the entity's business: _____

2. Accredited Investor Status.

Please check or initial all that apply to verify that you qualify as an “accredited investor.”

_____ (a) I am a natural person whose net worth, or joint net worth with spouse, at the date of purchase exceeds \$1,000,000 **(not including the value of your principal residence and excluding mortgage debt secured by your principal residence up to the estimated fair market value of the home, except that any mortgage debt incurred by you within 60 days prior to the date of this Questionnaire shall not be excluded from the determination of your net worth unless such mortgage debt was incurred to acquire the residence).**

_____ (b) I am a natural person whose individual gross income (excluding that of spouse) exceeded \$200,000 in 2010 and 2011, and who reasonably expects individual gross income exceeding \$200,000 in 2012.

_____ (c) I am a natural person whose joint gross income with spouse exceeded \$300,000 in 2010 and 2011, and who reasonably expects joint gross income with spouse exceeding \$300,000 in 2012.

_____ (d) Shareholder is a bank, savings and loan association, broker/dealer, insurance company, investment company, pension plan or other entity defined in Rule 501(a)(1) of Regulation D as promulgated under the Securities Act of 1933 by the Securities and Exchange Commission.

_____ (e) Shareholder is a trust, and the trustee is a bank, savings and loan association, or other institutional investor as defined in Rule 501(a)(1) of Regulation D as promulgated under the Securities Act of 1933 by the Securities and Exchange Commission.

_____ (f) Shareholder is a private business development company as defined in section 202(a)(22) of the Investment Advisers Act of 1940.

_____ (g) Shareholder is a trust, and the grantor (i) has the power to revoke the trust at any time and regain title to the trust assets; and (ii) meets the requirements of items (a) (b), or (c) above.

_____ (h) Shareholder is a tax-exempt organization described in Section 501(c)(3) of the Internal Revenue Code, or a corporation, Massachusetts or similar business trust, or partnership, not formed for the specific purpose of acquiring BioTime Shares or LifeMap Shares, with total assets in excess of \$5,000,000.

_____ (i) Shareholder is a trust with total assets in excess of \$5,000,000, not formed for the specific purpose of acquiring BioTime Shares or LifeMap Shares, whose purchase is directed by a person who has such knowledge and experience in financial and business matters that he is capable of evaluating the merits and risks of an investment in the BioTime Shares.

_____ (j) Shareholder is an entity in which all of the equity owners meet the requirements of at least one of items (a) through (i) above.

_____ (k) I am a director or executive officer of both BioTime and LifeMap.

_____ (l) None of the above apply.

3. Investment Representations and Warranties.

(a) Shareholder and Shareholder's attorneys, accountants, and financial advisors have made such investigation of LifeMap and BioTime as they have deemed appropriate for determining to acquire (and thereby make an investment in) the BioTime Shares and LifeMap Shares; and in making such investigation, they have received copies of the following reports filed by BioTime with the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended (the **Disclosure Documents**): Annual Report on Form 10-K for the year ended December 31, 2010; definitive proxy statement for BioTime's most recent annual meeting of shareholders; and each Quarterly Reports on Form 10-Q and each Current Report on Form 8-K filed by BioTime after the filing of its most recent Annual Report on Form 10-K.

(b) Shareholder and Shareholder's attorneys, accountants, and financial advisors have made such investigation of Xennex as they have deemed appropriate for evaluating their Xennex stock and for determining to vote with respect to the merger. In this regard, Shareholder and Shareholder's attorneys, accountants, and financial advisors have had access to and have received from Xennex such financial statements and other information concerning the financial condition, assets, liabilities, revenues, contracts, patents, patent applications, business operations, and prospects of Xennex as they may have requested.

(c) Shareholder understands that the BioTime Shares and LifeMap Shares are being offered and sold without registration under the Securities Act or registration or qualification under the California Corporate Securities Law of 1968, the laws of other states of the United States, or under the laws of any other state or jurisdiction, in reliance upon the exemptions from such registration and qualification requirements for non-public offerings. Shareholder acknowledges and understands that the availability of the aforesaid exemptions depends in part upon the accuracy of certain of the representations, declarations, and warranties contained herein, which Shareholder makes with the intent that they may be relied upon by BioTime and LifeMap. Shareholder understands and acknowledges that no United States federal, state, or other agency has reviewed or endorsed the offer or sale of the BioTime Shares or LifeMap Shares or made any finding or determination as to the fairness of the offering or sale of the BioTime Shares or LifeMap Shares.

(d) Shareholder, either alone or together with Shareholder's attorneys, accountants, and financial advisors, has such knowledge and experience in financial and business matters to enable it to evaluate the merits and risks of an investment in the BioTime Shares and LifeMap Shares and to make an informed investment decision with respect thereto.

(e) Shareholder is acquiring the BioTime Shares and LifeMap Shares solely for Shareholder's own account and for investment purposes, and not with a view to, or for sale in connection with, any distribution of the BioTime Shares or LifeMap Shares, unless registered under the Securities Act or pursuant to an exemption from such registration.

(f) It has never been represented, guaranteed, or warranted to Shareholder by BioTime or LifeMap, or by any officer, director, employee, or agent of BioTime or LifeMap, that Shareholder will realize any specific value, sale price, or profit as a result of acquiring the BioTime Shares or LifeMap Shares.

4. Resale Restrictions. Shareholder acknowledges, understands and agrees that:

(a) Shareholder will not sell, offer for sale, or transfer any of Shareholder's BioTime Shares or LifeMap Shares in any manner unless those BioTime Shares or LifeMap Shares have been registered under the Securities Act, or unless there is an exemption from such registration and an opinion of counsel reasonably acceptable to BioTime has been rendered, stating that such offer, sale, or transfer will not violate any United States federal or state securities laws.

(b) The certificates evidencing BioTime Shares and LifeMap Shares to be issued in the merger will contain a legend to the effect that transfer is prohibited except pursuant to registration under the Securities Act, or pursuant to an available exemption from registration.

(c) BioTime and LifeMap will not permit the registration of the transfer of any BioTime Shares or LifeMap Shares, respectively, and BioTime and LifeMap will issue instructions to any transfer agent and registrar of the BioTime Shares or LifeMap Shares to refuse to register the transfer of any BioTime Shares or LifeMap Shares not made pursuant to registration under the Securities Act, or pursuant to an available exemption from registration under the Securities Act.

5. Authority. If Shareholder is an entity rather than a natural person, Shareholder represents and warrants that Shareholder has the power and authority to execute and deliver this Shareholder Questionnaire; and, the execution and delivery of this Shareholder Questionnaire has been duly authorized by Shareholder's board of directors, managers, partners, or persons holding comparable authority.

6. No Litigation. Shareholder represents and warrants that there are no pending or threatened lawsuits or other proceedings, or any basis therefore, challenging the right or authority of Shareholder to vote Shareholder's Xennex stock with regard to the merger.

IN WITNESS WHEREOF, the undersigned has executed this Shareholder Questionnaire on _____, 2012.

Name of Shareholder (Typed or Printed)

Signature

Second Name if Joint Tenant, etc.

Second Signature

If Shareholder is a corporation, partnership or trust:

Name and Title of Person Signing
(Typed or Printed)

EXHIBIT D

Escrow Agreement

ESCROW AGREEMENT

This Escrow Agreement dated May __, 2012 (the "**Escrow Agreement**"), is entered into by and among Xennex, Inc., a Massachusetts corporation, whose principal office is located at 1020 Plain Street, Suite 290, Marshfield, MA 02050, ("**Xennex**"), LifeMap Sciences, Inc., a California corporation, whose principal office is located at 1301 Harbor Bay Parkway, Suite 100, Alameda, CA, 94502 ("**LifeMap**"), BioTime, Inc., a California corporation, whose principal office is located at 1301 Harbor Bay Parkway, Suite 100, Alameda, CA, 94502 ("**BioTime**"), Kenneth Elsner, as the representative and agent for the Xennex stockholders named on Schedule I to this Escrow Agreement ("**Representative**"), and Wells Fargo Bank, National Association, a California corporation, as escrow agent ("**Escrow Agent**"). Xennex, LifeMap and BioTime are referred to, collectively, as the "**Parties**."

RECITALS

A. Xennex, LifeMap, and BioTime have entered into an Agreement and Plan of Merger dated April __, 2012 (the "**Merger Agreement**", attached to this Agreement as Exhibit A) for the merger of Xennex with and into LifeMap (the "**Merger**"), pursuant to which the "**Merger Consideration**" (as defined in the Merger Agreement, and hereby incorporated into this Escrow Agreement) consists of 448,430 common shares, no par value, of BioTime and 1,362,589 shares of common stock of LifeMap.

B. The Parties agree to place in escrow 44,843 of the BioTime common shares ("**BioTime Escrow Shares**") and 136,259 shares of the LifeMap common stock ("**LifeMap Escrow Shares**") comprising a part of the Merger Consideration issued to the Xennex stockholders, and the Escrow Agent agrees to hold and distribute the BioTime Escrow Shares and LifeMap Escrow Shares in accordance with the terms of this Escrow Agreement. The BioTime Escrow Shares and LifeMap Escrow Shares are collectively referred to as the "**Escrow Securities**."

In consideration of the promises and agreements of the Parties and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties and the Escrow Agent agree as follows:

Article 1 ESCROW DEPOSIT

1.1 Receipt of Escrow Securities. On or before the Closing Date (as defined in the Merger Agreement), BioTime and LifeMap shall deliver to the Escrow Agent stock certificates registered in the name of Representative for the benefit of the Xennex stockholders collectively representing the Escrow Securities (the "**Certificates**") to be held in escrow by Escrow Agent under the terms and conditions of this Escrow Agreement (the "**Escrow**"). The Escrow Agent shall inform each Party in writing of its receipt of the Certificates, within two business days of its receipt of the Certificates from BioTime and LifeMap. The Escrow Securities shall also include any (a) other common shares or other securities issued or distributed by BioTime or LifeMap with respect to the BioTime Escrow Shares or LifeMap Escrow Shares as part of a share split or share dividend, reclassification of shares; or other distribution to holders of BioTime or LifeMap common shares or common stock, any (b) other securities into which the Escrow Shares may be converted by means of any recapitalization or reclassification of the common shares of BioTime or common stock of LifeMap, or upon any merger or consolidation of BioTime or LifeMap with any other business entity, and (c) any cash paid or distributed by BioTime or LifeMap with respect to Escrow Securities or that may be paid on account of Escrow Securities in connection with any merger or consolidation of BioTime or LifeMap with any other business entity. The Escrow Agent shall have no duty to determine, ascertain, or verify the monetary value of the Certificates. The Representative shall have all voting rights with respect to the Escrow Securities contributed to the escrow on behalf of each Xennex stockholder as such stockholder would be entitled if such stockholder held such Escrow Securities directly except that the Representative shall not have (i) the right of possession thereof or (ii) the right to sell, assign, pledge, hypothecate or otherwise dispose of or encumber such Escrow Securities or any interest therein. The Escrow Securities shall be registered in the name of the Representative for the benefit of the Xennex stockholders identified and as their respective interests in the Escrow Securities appear on Schedule I hereto.

1.2 Stock Transfer Power. On or before the Closing Date, Representative shall deliver to the Escrow Agent (a) a stock transfer power signed in blank authorizing American Stock Transfer and Trust Company (the "**TransferAgent**"), whose registered office is at 59 Maiden Lane, Plaza Level, New York, NY 10038 to transfer or cancel the BioTime Escrow Shares on the transfer records of BioTime, subject to an in accordance with the terms of this Escrow Agreement and the Merger Agreement, and (b) a stock transfer power signed in blank authorizing LifeMap to transfer or cancel the LifeMap Escrow Shares on the transfer records of LifeMap, subject to an in accordance with the terms of this Escrow Agreement and the Merger Agreement.

1.3 Closing Date. The "**Closing Date**" for the merger is contemplated to occur on or about May 18, 2012, but shall occur on such date or on such other date as may be provided for under the Merger Agreement or as to which as the Parties may agree. If the Closing Date is to be any date other than May 18 2012, the Parties shall notify Escrow Agent in writing of the new Closing Date.

1.4 Disbursements.

(a) *Escrow Claims.* An "**Escrow Claim**" shall be deemed to have occurred if within 180 days after the Closing Date (i) any claim for setoff has been made pursuant to Section 1.9 of the Merger Agreement and in accordance with the Merger Agreement, and one of the Parties has concurrently notified the Escrow Agent of such claim, (ii) a third party has made a claim (whether or not a lawsuit or arbitration proceeding has commenced) that is subject to indemnification under the Merger Agreement, and one of the Parties has concurrently notified the Escrow Agent of such claim, or (iii) any dispute between the Parties is litigated or arbitrated or submitted for resolution through any other legal proceeding, and one of the Parties has notified Escrow Agent of such claim. The Escrow Agent shall not release any Escrow Securities until it has received written instructions pursuant to Section 1.4(b). Any Escrow Claim shall be deemed to have occurred if received before the Escrow Termination Date by the Escrow Agent. BioTime or the Representative shall provide advance written notice of the identity of the arbitrator to the Escrow Agent pursuant to this Section 1.4.

(b) *Disbursements to Satisfy Escrow Claims.* Escrow Agent shall release Escrow Securities within ten (10) business days after the following events: (i) Escrow Agent shall release BioTime Escrow Shares to BioTime and/or the Transfer Agent, and shall release LifeMap Escrow Shares to LifeMap pursuant to, and following the receipt of, written request for delivery signed by BioTime and LifeMap and the Representative stating the amount of the Escrow Claim and the number of BioTime Escrow Shares and LifeMap Escrow Shares that will satisfy the amount of the Escrow Claim or (ii) in the case of a lawsuit, arbitration or other legal proceeding resulting in a final award or judgment, following Escrow Agent's receipt of (1) written notice of the final award or judgment in the lawsuit, arbitration or other proceeding, from the prevailing party, and (2) a copy of such final award or judgment; or (iii) in the case of an arbitration or other proceeding resulting in an award or judgment *and* where the Escrow Agent has filed an interpleader action with a court of competent jurisdiction, following Escrow Agent's receipt of notice of the order of such court. In the case of a liquidated Escrow Claim requiring the release of Escrow Securities, Escrow Agent shall only release the Escrow Securities to BioTime, the Transfer Agent, or LifeMap to the extent necessary to satisfy the obligations in respect of the Escrow Claim. The number of BioTime Escrow Shares and LifeMap Escrow Shares, respectively, to be released to BioTime, the Transfer Agent, or LifeMap in satisfaction of the Escrow Claim shall be computed in accordance with Section 1.9 of the Merger Agreement and such calculation shall be provided by the Parties to Escrow Agent upon request. The Escrow Agent shall deliver the Escrow Securities and stock transfer powers to the Transfer Agent, BioTime, and/or LifeMap (as applicable) for cancellation in satisfaction of the Escrow Claim. If any amount less than 100% of the Escrow Securities are to be returned to BioTime, the Transfer Agent, and/or LifeMap, then (i) the Representative shall promptly sign and deliver to the Escrow Agent a stock transfer power authorizing BioTime and/or the Transfer Agent to cancel the applicable portion of the BioTime Escrow Shares and authorizing LifeMap to cancel the applicable portion of the LifeMap Escrow Shares, (ii) the Escrow Agent shall then deliver the Escrow Shares and the stock transfer power signed by the Representative to the Transfer Agent to cancel the applicable portion of the Escrow Shares, and (iii) the Transfer Agent shall deliver new stock certificates to the Escrow Agent representing the number of BioTime Escrow Shares and LifeMap Escrow Shares that the Xennex stockholders are entitled to receive after satisfaction of the Escrow Claim. The BioTime Escrow Shares and LifeMap Escrow Shares will be delivered concurrently to BioTime or the Transfer Agent and LifeMap, as applicable, in accordance with the terms of the Merger Agreement and this Escrow Agreement. If any Escrow Securities are returned to BioTime, the Transfer Agent, or LifeMap to satisfy an Escrow Claim, the Representative shall promptly sign and deliver to the Escrow Agent new stock transfer powers authorizing the BioTime, the Transfer Agent and LifeMap to transfer or cancel any remaining Escrow Securities on the stock records of BioTime or LifeMap to allow for the satisfaction of any subsequent Escrow Claim or for distribution of Escrow Securities in accordance with the terms of this Escrow Agreement.

(c) *Disbursements Upon Termination of Escrow.* If this Escrow Agreement terminates under Section 1.5(a), Escrow Agent shall return all BioTime Escrow Shares to BioTime and all LifeMap Escrow Shares to LifeMap, and shall return to the Representative the stock transfer powers, within ten (10) days after termination of Escrow. If this Escrow Agreement terminates under Section 1.5(b), within ten (10) business days following the escrow termination, Escrow Agent shall deliver to the Transfer Agent the BioTime Escrow Shares along with a stock transfer power, shall deliver to BioTime any cash deposited into Escrow with respect to BioTime Escrow Shares with any interest accrued thereon ("**BioTime Escrow Cash**"), and shall deliver to LifeMap the LifeMap Escrow Shares along with a stock transfer power and any cash deposited into Escrow on account of LifeMap Escrow Shares with any interest accrued thereon ("**LifeMap Escrow Cash**"), whereupon BioTime will cause the Transfer Agent to transfer and reissue the (remaining) BioTime Escrow Shares (then no longer subject to escrow), and LifeMap will cause the (remaining) LifeMap Escrow Shares (then no longer subject to escrow) to be transferred on the appropriate transfer ledger and reissued, all in accordance with the interests of the respective Xennex stockholders as set forth on Schedule I hereto, whereupon the same shall be returned to the Escrow Agent and disbursed, along with any BioTime Escrow Cash and LifeMap Escrow Cash remaining in Escrow, to the Xennex stockholders at their respective addresses shown on Schedule I.

(d) *Cash Dividends or other Cash Distributions.* Any cash dividends or cash distributions of any kind made in respect to the Escrow Securities shall be held in Escrow and either paid to BioTime and/or LifeMap on account of any Claim as provided in the Merger Agreement, or disbursed to the Xennex stockholders in connection with the termination of this Agreement.

1.5 Escrow Termination.

(a) If the Merger fails to close on the Closing Date, the BioTime and LifeMap shall notify the Escrow Agent of such failure, and this Escrow Agreement shall terminate upon Escrow Agent's receipt of such notice.

(b) If the Merger is consummated on the Closing Date, Escrow shall terminate on the later of (i) the expiration of 180 days following the Closing Date (the "**Escrow Termination Date**"); and (ii) the date on which all Escrow Claims have been resolved or terminated in accordance with the provisions of the Merger Agreement. An Escrow Claim shall not be deemed to have been resolved until (A) the Representative, BioTime, and LifeMap have notified the Escrow Agent in writing that the Escrow Claim has been resolved, or (B) the Escrow Claim has been resolved by a final court judgment or arbitration award.

(c) Notwithstanding paragraphs (a) and (b) of this Section, Escrow shall terminate upon the disbursement of all Escrow Securities and any cash held in Escrow.

(d) Upon the termination of Escrow, this Escrow Agreement shall be of no further force and effect except that the provisions of Sections 3.1 (Indemnification) and 3.2 (Limitation of Liability) hereof shall survive termination.

1.6 No Pledge. Except as contemplated by this Agreement, neither the Escrow Securities nor any beneficial interest therein may be pledged, sold, assigned or transferred, including by operation of law, by Escrow Agent, BioTime, LifeMap, Xennex, or the Representative, nor shall the Escrow Securities or any beneficial interest therein be subject to attachment or otherwise taken or reached by any legal or equitable process in satisfaction of any debt or other liability, except as expressly set forth herein, before the Escrow Securities, if any, are returned to BioTime, the Transfer Agent, or LifeMap, or distributed to the Xennex stockholders pursuant to the terms hereof and subject to Sections 1.9 of the Merger Agreement.

Article 2
DUTIES OF THE ESCROW AGENT

2.1 Scope of Responsibility. Notwithstanding any provision to the contrary, the Escrow Agent is obligated only to perform the duties specifically set forth in this Escrow Agreement, which shall be deemed purely ministerial in nature. Under no circumstances will the Escrow Agent be deemed to be a fiduciary to any Party or any Xenex stockholder, or any other person under this Escrow Agreement. The Escrow Agent will not be responsible or liable for the failure of any Party to perform in accordance with this Escrow Agreement. The Escrow Agent shall neither be responsible for, nor chargeable with, knowledge of the terms and conditions of any other agreement, instrument, or document other than this Escrow Agreement, unless an original or a copy of such agreement has been provided to the Escrow Agent; and the Escrow Agent shall have no duty to know or inquire as to the performance or nonperformance of any provision of any such agreement, instrument, or document, unless notified of such performance or nonperformance by any Party. References in this Escrow Agreement to any other agreement, instrument, or document are for the convenience of the Parties, and the Escrow Agent has no duties or obligations with respect thereto. This Escrow Agreement sets forth all matters pertinent to the Escrow contemplated hereunder, and no additional obligations of the Escrow Agent shall be inferred or implied from the terms of this Escrow Agreement or any other agreement.

2.2 Reliance. The Escrow Agent shall not be liable for any action taken or not taken by it in accordance with the direction or consent of the Parties or their respective agents, representatives, successors, or assigns, but only if such direction or consent is consistent with the terms of this Escrow Agreement. The Escrow Agent shall not be liable for acting or refraining from acting upon any notice, request, consent, direction, requisition, certificate, order, affidavit, letter, or other paper or document believed by it to be genuine and correct and to have been signed or sent by the proper person or persons, without further inquiry into the person's or persons' authority. Concurrent with the execution of this Escrow Agreement, the Parties shall deliver to the Escrow Agent authorized signers' forms in the form of Exhibit B to this Escrow Agreement.

2.3 Right Not Duty Undertaken. The permissive rights of the Escrow Agent to do things enumerated in this Escrow Agreement shall not be construed as duties.

2.4 No Financial Obligation. No provision of this Escrow Agreement shall require the Escrow Agent to risk or advance its own funds or otherwise incur any financial liability or potential financial liability in the performance of its duties or the exercise of its rights under this Escrow Agreement.

Article 3
PROVISIONS CONCERNING THE ESCROW AGENT

3.1 Indemnification. The Parties, jointly and severally, shall indemnify, defend and hold harmless the Escrow Agent from and against any and all loss, liability, cost, damage, and expense, including, without limitation, attorneys' fees and expenses or other professional fees and expenses which the Escrow Agent may suffer or incur by reason of any action, claim, or proceeding brought against the Escrow Agent, arising out of or relating in any way to this Escrow Agreement or any transaction to which this Escrow Agreement relates, unless such loss, liability, cost, damage, or expense shall have been finally adjudicated to have been directly caused by the willful misconduct or gross negligence of the Escrow Agent. The provisions of this Section 3.1 shall survive the resignation or removal of the Escrow Agent and the termination of this Escrow Agreement.

3.2 Limitation of Liability. The Escrow Agent shall not be liable, directly or indirectly, for any (i) damages, losses, or expenses arising out of the services provided hereunder, other than damages, losses, or expenses which have been finally adjudicated to have directly resulted from the Escrow Agent's gross negligence or willful misconduct, or (ii) special, indirect, or consequential damages or LOSSES OF ANY KIND WHATSOEVER (INCLUDING WITHOUT LIMITATION LOST PROFITS), even if the Escrow Agent has been advised of the possibility of such LOSSES OR damages AND REGARDLESS OF THE FORM OF ACTION.

3.3 Removal or Resignation.

(a) Removal. The Parties may remove the Escrow Agent by furnishing to the Escrow Agent a joint written notice of its removal along with payment of all fees and expenses to which the Escrow Agent is entitled through the date of termination. Such removal shall be effective thirty (30) days after the delivery of such notice or upon the earlier appointment of a successor escrow agent, and the Escrow Agent's sole responsibility thereafter shall be to safely keep the Escrow Securities and to deliver the same to a successor escrow agent as shall be appointed by the Parties, as evidenced by a joint written notice filed with the Escrow Agent or in accordance with the order of a court or other dispute resolution authority. If the Parties have failed to appoint a successor escrow agent prior to the expiration of thirty (30) days following the delivery of such notice of removal, the Escrow Agent may petition any court of competent jurisdiction for the appointment of a successor escrow agent or for other appropriate relief, and any such resulting appointment shall be binding upon the Parties.

(b) Resignation. If the Escrow Agent shall resign as the escrow agent hereunder, a successor escrow agent shall be promptly appointed jointly by the Parties. The Escrow Agent may resign at any time by giving to the Parties thirty (30) days' written notice of resignation (the "**Resignation Notice**"). Such resignation shall take effect when the successor escrow agent accepts in writing its appointment as successor escrow agent and receives the Escrow Securities from the Escrow Agent or, upon disposition of the Escrow Securities, in accordance with written instructions of the Parties. If no successor escrow agent has been appointed and has accepted the Escrow Securities within thirty (30) days after the Resignation Notice is sent, the Escrow Agent may apply to a court of competent jurisdiction for the appointment of a successor escrow agent or for other appropriate relief, and any such resulting appointment shall be binding upon the Parties.

3.4 Compensation. The Escrow Agent shall be entitled to compensation for its services as stated in the fee schedule attached hereto as Exhibit C, which compensation shall be paid by LifeMap. The fee agreed upon for the services rendered hereunder is intended as annual full compensation for the Escrow Agent's services as contemplated by this Escrow Agreement; provided, however, that in the event that Escrow Agent renders any service not contemplated in this Escrow Agreement, or there is any assignment of interest in the subject matter of this Escrow Agreement, or any material modification hereof, or if any material controversy arises hereunder which causes the Termination of Escrow to take place more than eighteen (18) months after the Closing Date, or the Escrow Agent is made a party to any litigation pertaining to this Escrow Agreement or the subject matter hereof, then the Escrow Agent shall be compensated for such extraordinary services and reimbursed by the non-prevailing Party for all costs and expenses, including reasonable attorneys' fees and expenses, occasioned by any such delay, controversy, litigation, or event. If any amount due to the Escrow Agent hereunder is not paid within thirty (30) days of the date due, the Escrow Agent in its sole discretion may charge interest on such amount up to the highest rate permitted by applicable law.

3.5 Merger or Consolidation. Any corporation or association into which the Escrow Agent may be converted or merged, or with which it may be consolidated, or to which it may sell or transfer all or substantially all of its corporate trust business and assets as a whole or substantially as a whole, or any corporation or association resulting from any such conversion, sale, merger, consolidation, or transfer to which the Escrow Agent is a party ("**Corporate Event**"), shall be and become the successor escrow agent under this Escrow Agreement and shall have and succeed to the rights, powers, duties, immunities, and privileges as its predecessor, without the execution or filing of any instrument or paper or the performance of any further act. Escrow Agent shall notify the Parties of any such Corporate Event occurring prior to the Termination of Escrow.

3.6 Force Majeure. The Escrow Agent shall not be responsible or liable for any failure or delay in the performance of its obligation under this Escrow Agreement arising out of or caused, directly or indirectly, by circumstances beyond its reasonable control, including, without limitation, acts of God, earthquakes, fire, flood, wars, acts of terrorism, civil or military disturbances, sabotage, epidemic, riots, interruptions, loss, or malfunctions of utilities, computer (hardware or software) or communications services, accidents, labor disputes, acts of civil or military authority or governmental action; it being understood that the Escrow Agent shall use commercially reasonable efforts which are consistent with accepted practices in the banking industry to resume performance as soon as reasonably practicable under the circumstances.

Article 4 MISCELLANEOUS

4.1 Successors and Assigns. This Escrow Agreement shall be binding on and inure to the benefit of the Parties and the Escrow Agent and their respective successors and permitted assigns. No other persons shall have any rights under this Escrow Agreement. No assignment of the interest of any of the Parties shall be binding unless and until written notice of such assignment shall be delivered to the other Party and the Escrow Agent and shall require the prior written consent of the other Party and the Escrow Agent (such consent not to be unreasonably withheld).

4.2 Further Assurances. The Representative will execute, acknowledge, and deliver to Escrow Agent such additional stock transfer powers, instruments, notices, and documents; and will take such additional actions as BioTime, LifeMap, Escrow Agent, or the Transfer Agent may reasonably request to effect, complete, or perfect the transfer or cancellation of Escrow Securities pursuant to this Escrow Agreement.

4.3 Escheat. The Parties are aware that under applicable state law, property which is presumed abandoned may under certain circumstances escheat to the applicable state. The Escrow Agent shall have no liability to the Parties, their respective heirs, legal representatives, successors and assigns, or any other party, should any or all of the Escrow Securities escheat by operation of law.

4.4 Notices. All notices, requests, demands, and other communications required under this Escrow Agreement shall be in writing, in English, and shall be deemed to have been duly given if delivered (i) personally, (ii) by facsimile transmission with written confirmation of receipt, (iii) by overnight delivery with a reputable national overnight delivery service, or (iv) by mail or by certified mail, return receipt requested, and postage prepaid. If any notice is mailed, it shall be deemed given five business days after the date such notice is deposited in the United States mail. If notice is given to a party, it shall be given at the address for such party set forth below. It shall be the responsibility of the Parties to notify the Escrow Agent and the other Party or Parties in writing of any name or address changes. In the case of communications delivered to the Escrow Agent, such communications shall be deemed to have been given on the date received by the Escrow Agent.

If to BioTime:

BioTime, Inc.
1301 Harbor Bay Parkway, Suite 100
Alameda, CA 94502
Attn: Michael D. West
Phone: (510) 521-3390, ext. 303
Facsimile: (510) 521-3389

With a copy to:

Thompson, Welch,
Soroko & Gilbert, LLP
235 Pine Street
13th Floor
San Francisco, CA 94104
Attn: Richard S. Soroko, Esq.
Phone: (415) 927-5200
Facsimile: (415) 927-5210

If to Xennex:

Xennex, Inc.
1020 Plain Street, Suite 290
Marshfield, MA 02050
Attn: David Warshawsky, President
Phone: 781-826-7719
Facsimile: 781-826-7609

with a copy to:
Kenneth Elsner
1020 Plain Street, Suite 290
Marshfield, MA 02050
Phone: 781-826-7719
Facsimile: 781-826-7609

If to Representative

Kenneth Elsner
1020 Plain Street, Suite 290
Marshfield, MA 02050
Phone: 781-826-7719
Facsimile: 781-826-7609

If to the Escrow Agent:

Wells Fargo Bank, National Association
Corporate, Municipal and Escrow Services
707 Wilshire Boulevard, 17th floor.
Los Angeles, California 90017
Phone: (213) 614-3493
Facsimile: (213) 614-3306

4.5 Governing Law. This Escrow Agreement shall be governed by and construed in accordance with the laws of the State of California.

4.6 Entire Agreement. This Escrow Agreement sets forth the entire agreement and understanding of the Parties related to the Escrow Securities.

4.7 Amendment. This Escrow Agreement may be amended, modified, superseded, rescinded, or canceled only by a written instrument executed by the Parties and the Escrow Agent.

4.8 Waivers. The failure of any Party to this Escrow Agreement at any time or times to require performance of any provision under this Escrow Agreement shall in no manner affect the right at a later time to enforce the same performance. A waiver by any Party to this Escrow Agreement of any such condition or breach of any term, covenant, representation, or warranty contained in this Escrow Agreement, in any one or more instances, shall neither be construed as a further or continuing waiver of any such condition or breach nor a waiver of any other condition or breach of any other term, covenant, representation, or warranty contained in this Escrow Agreement.

4.9 Headings. Section headings of this Escrow Agreement have been inserted for convenience of reference only and shall in no way restrict or otherwise modify any of the terms or provisions of this Escrow Agreement.

4.10 Counterparts. This Escrow Agreement and the Certificate as to Authorized Signatures attached as Exhibit B may be executed in one or more counterparts, each of which when executed shall be deemed to be an original, and such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF, this Escrow Agreement has been duly executed as of the date first written above.

[signatures on following page]

BIOTIME:

BioTime, Inc.,
a California corporation

By: _____
Name: Michael D. West
Title: Chief Executive Officer

LIFEMAP:

LifeMap, Inc.,
a California corporation

By: _____
Name: Michael D. West
Title: Chief Executive Officer

XENNEX:

Xennex, Inc.,
a Massachusetts corporation

By: _____
Name: _____
Title: _____

REPRESENTATIVE:

Kenneth Elsner

ESCROW AGENT:

Wells Fargo Bank, National Association

By: _____
Name: _____
Title: _____

Exhibit A
Merger Agreement

- Exhibit A -

Exhibit B

Certificate as to Authorized Signatures

The specimen signatures shown below are the specimen signatures of the individuals who have been designated as authorized representatives of the respective Parties and are authorized to initiate and approve transactions of all types for the Escrow account or accounts established under the Escrow Agreement to which this Exhibit B is attached.

BIOTIME:

BioTime, Inc.,
a California corporation

By: _____
Name: Michael D. West
Title: Chief Executive Officer

LIFEMAP:

LifeMap, Inc.,
a California corporation

By: _____
Name: Michael D. West
Title: Chief Executive Officer

XENNEX:

Xennex, Inc.,
a Massachusetts corporation

By: _____
Name: _____
Title: _____

Exhibit C

Escrow Agent Fees

February 9, 2011

Wells Fargo Corporate Trust
707 Wilshire Blvd – 17th Floor
Los Angeles, CA 90017
John Deleray (TP)
213.614.3351 – office
213.760.0363 – mobile
213.614.3355 - fax

Wells Fargo Corporate Trust Services
Fee Schedule for Escrow Agent for the
BioTime, Inc. Stock Escrow

Escrow Agent Acceptance and Administrative Fee:	\$ _____
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Fees as they relate to Wells Fargo Bank acting in the capacity of Escrow Agent – includes creation and examination of the Escrow Agreement; acceptance of the Escrow appointment; setting up of Escrow Account(s) and accounting records; and coordination of receipt of funds for deposit to the Escrow Account.

Also includes ordinary administration services by Escrow Agent – includes daily routine account management; investment transactions; cash transaction processing (including wires and check processing); monitoring claim notices pursuant to the agreement; disbursement of the funds in accordance with the agreement; and mailing of trust account statements to all applicable parties.

This fee is Payable in advance, at the time of Escrow Agreement execution. Fee will not be prorated in case of early termination.

Should this Escrow Account be in existence for more than One (1) year, an Annual Fee of \$3,000.00 will be assessed.

Wells Fargo's bid is based on the following assumptions:

- Number of Escrow Accounts to be established: One (1)
 - Number of Deposits to Escrow Account: Not more than One (1)
 - Number of Withdrawals from Escrow Fund:
 - Term of Escrow: Not more than One (1) year
 - If the account(s) does not open within three (3) months of the date shown below, this proposal will be deemed null and void
-

Out-of-Pocket Expenses:

At Cost

We only charge for out-of-pocket expenses in response to specific tasks assigned by the client. Therefore, we cannot anticipate what specific out-of-pocket items will be needed or what corresponding expenses will be incurred. Possible expenses would be, but are not limited to, express mail and messenger charges, travel expenses to attend closing or other meetings. There are no charges for indirect out-of-pocket expenses.

This fee schedule is based upon the assumptions listed above which pertain to the responsibilities and risks involved in Wells Fargo undertaking the role of Escrow Agent. These assumptions are based on information provided to us as of the date of this fee schedule. Our fee schedule is subject to review and acceptance of the final documents. Should any of the assumptions, duties or responsibilities change, we reserve the right to affirm, modify or rescind our fee schedule.

SCHEDULE I

[Legal Name and Address]

EXHIBIT E

Registration Rights Agreement

REGISTRATION RIGHTS AGREEMENT

By

BIOTIME, INC.

For the benefit of

STOCKHOLDERS OF XENNEX, INC.

Dated: May __, 2012

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REGISTRATION RIGHTS AGREEMENT

THIS REGISTRATION RIGHTS AGREEMENT, dated as of May __, 2012, is made by BioTime, Inc., a California corporation (the "Company"), for the benefit each Shareholder (as defined below) who is the registered holder of Registrable Securities (as defined below).

WHEREAS, the parties hereto desire to provide for, among other things, the grant of registration rights with respect to the Registrable Securities.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein and for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. Definitions and Interpretations.

(a) Definitions. As used in this Agreement, and unless the context requires a different meaning, the following terms have the meanings indicated:

(i) "Acquired Shares" means the Shares issued to the shareholders of Xennex pursuant to that certain Agreement and Plan of Merger, dated April 19, 2012, by and among the Company, LifeMap Sciences, Inc., and Xennex (the "Merger Agreement"), including any Shares placed into escrow or subject to holdback.

(ii) "Affiliate" means, with respect to a Person, any other Person directly or indirectly controlling, controlled by or under direct or indirect common control with such specified Person. For purposes of this definition, "control" (including, with correlative meanings, the terms "controlling," "controlled by" and "under common control with"), as used with respect to a Person, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ownership of voting securities, by agreement or otherwise.

(iii) "Agreement" means this Registration Rights Agreement as the same may be amended, supplemented or modified in accordance with the terms.

(iv) "Automatic Shelf Registration Statement" means an "automatic shelf registration statement" as defined in Rule 405 promulgated under the Securities Act.

(v) "Board of Directors" means the Board of Directors of the Company (or any duly authorized committee thereof).

(vi) "Business Day" means any day other than a Saturday, Sunday or other day on which commercial banks in New York, New York and San Francisco, California are authorized or required by law or executive order to close.

- Securities Act.
- (vii)** “Commission” means the Securities and Exchange Commission or any similar agency then having jurisdiction to enforce the Securities Act.
 - (viii)** “Company” has the meaning set forth in the preamble to this Agreement.
 - (ix)** “Company Free Writing Prospectus” means each Free Writing Prospectus prepared by or on behalf of the Company or used or referred to by the Company in connection with an offering of Registrable Securities.
 - (x)** “Disclosure Package” means, with respect to any offering of Registrable Securities, (i) the preliminary Prospectus, (ii) each Free Writing Prospectus and (iii) all other information, in each case, that is deemed, under Rule 159 promulgated under the Securities Act, to have been conveyed to purchasers of securities at the time of sale of such securities (including, without limitation, a contract of sale).
 - (xi)** “Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission thereunder.
 - (xii)** “Free Writing Prospectus” means any “free writing prospectus” as defined in Rule 405 promulgated under the Securities Act.
 - (xiii)** “Indemnified Party” has the meaning set forth in Section 4(c).
 - (xiv)** “Indemnifying Party” has the meaning set forth in Section 4(c).
 - (xv)** “Inspector” has the meaning set forth in Section 3(b).
 - (xvi)** “Liability” has the meaning set forth in Section 4(a).
 - (xvii)** “Permitted Assignee” means with respect to any Shareholder, to the extent applicable, (i) such Shareholder’s parents, spouse, siblings, siblings’ spouses, children (including stepchildren and adopted children), children’s spouses, grandchildren or grandchildren’s spouses (“Family Members”), (ii) a corporation, partnership or limited liability company, a majority of the beneficial interests of which shall be held by such Shareholder, such Shareholder’s Affiliates and/or such Shareholder’s Family Members, (iii) a trust, the beneficiaries of which are such Shareholder and/or such Shareholder’s Family Members, (iv) such Shareholder’s heirs, executors, administrators, estate or a trust under such Shareholder’s will, (v) an entity described in Section 501(c)(3) of the United States Internal Revenue Code of 1986, as amended, that is established by such Shareholder, (vi) any Affiliate of such Shareholder, and (vii) Yeda Research and Development Company, Ltd. and the Weizmann Institute of Science.
 - (xviii)** “Person” means any individual, corporation, partnership, limited liability company, trust, incorporated or unincorporated association, joint venture, joint stock company, government (or an agency or political subdivision) or other entity of any kind, and shall include any successor (by merger or otherwise) of such entity.

(xix) “Pledgee” has the meaning set forth in Section 2(d)(i).

(xx) “Prospectus” means the prospectus related to any Registration Statement (including, without limitation, a prospectus or prospectus supplement that discloses information previously omitted from a prospectus filed as part of an effective registration statement in reliance on Rule 415, 430A, 430B or 430C under the Securities Act, as amended or supplemented by any amendment or prospectus supplement), including post-effective amendments, and all materials incorporated by reference in such prospectus.

(xxi) “Records” has the meaning set forth in Section 3(b)(viii).

(xxii) “Registrable Securities” means, subject to Section 2(b) and Section 2(d)(i), (i) the Acquired Shares, and (ii) any other securities that are (A) distributed as a dividend or otherwise with respect to Acquired Shares, or (B) issued or issuable in exchange for or through conversion of the Acquired Shares pursuant to a recapitalization, reorganization, merger, consolidation, sale of assets or other transaction.

(xxiii) “Registration Expenses” has the meaning set forth in Section 3(e).

(xxiv) “Registration Statement” means a registration statement filed pursuant to the Securities Act.

(xxv) “Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations of the Commission promulgated thereunder.

(xxvi) “Shareholder” means (a) the Persons named on Schedule I, who were stockholders of Xennex on the effective date of the merger of Xennex with and into LifeMap Sciences, Inc., and (b) such Permitted Assignees or Pledgees of the Persons named on Schedule I to whom registration rights under this Agreement are validly transferred in accordance with Section 2(d)(i).

(xxvii) “Shareholders’ Counsel” has the meaning set forth in Section 3(b).

(xxviii) “Shares” means (i) the common shares, no par value, of the Company, (ii) any securities of the Company or any successor or assign of the Company into which such shares described in clause (i) are reclassified or reconstituted or into which such shares are converted or otherwise exchanged in connection with a combination of shares, recapitalization, merger, sale of assets, consolidation or other reorganization or otherwise or (iii) any securities received as a dividend or distribution in respect of the securities described in clauses (i) and (ii) above.

(xxix) “Xennex” means Xennex, Inc., a Massachusetts corporation.

(b) Interpretation. Unless otherwise noted:

(i) All references to laws, rules, regulations and forms in this Agreement shall be deemed to be references to such laws, rules, regulations and forms, as amended from time to time or, to the extent replaced, the comparable successor laws, rules, regulations and forms thereto in effect at the time.

(ii) All references to agencies, self-regulatory organizations or governmental entities in this Agreement shall be deemed to be references to the comparable successor thereto.

(iii) All references to agreements and other contractual instruments shall be deemed to be references to such agreements or other instruments as they may be amended, waived, supplemented or modified from time to time.

(iv) All references to any amount of securities (including Registrable Securities) shall be deemed to be a reference to such amount measured on an as-converted or as-exercised basis.

2. General; Securities Subject to this Agreement

(a) Grant of Rights. The Company hereby grants registration rights to the Shareholders upon the terms and conditions set forth in this Agreement.

(b) Registrable Securities. For the purposes of this Agreement, Registrable Securities held by any Person will cease to be Registrable Securities when (i) a Registration Statement covering such Registrable Securities has been declared effective under the Securities Act by the Commission and such Registrable Securities have been disposed of pursuant to such effective Registration Statement, (ii) the entire amount of the Registrable Securities held by a Person may be sold in a single sale, in the opinion of counsel reasonably satisfactory to the Company, without any limitation as to volume or manner of sale pursuant to Rule 144 promulgated under the Securities Act, (iii) the Registrable Securities have ceased to be outstanding, or (iv) transferred pursuant to a transfer or pledge otherwise than pursuant to Section 2(d).

(c) Holders of Registrable Securities. A Person is deemed to be a holder of Registrable Securities whenever such Person owns of record Registrable Securities. If the Company receives conflicting instructions, notices or elections from two or more Persons with respect to the same Registrable Securities, the Company may act upon the basis of the instructions, notice or election received from the registered owner of such Registrable Securities.

(d) Transfer of Registration Rights.

(i) A Shareholder may transfer or pledge Registrable Securities with the associated registration rights under this Agreement (including transfers occurring by operation of law or by reason of intestacy) to a Permitted Assignee or a pledgee (“Pledgee”) only if (1) such Permitted Assignee or Pledgee agrees in writing to be bound as a Shareholder by the provisions of this Agreement, such agreement being substantially in the form of Annex A hereto, and (2) immediately following such transfer or pledge, the further disposition of such Registrable Securities by such Permitted Assignee or Pledgee would be restricted under the Securities Act and the entire amount of all such Registrable Securities could not be sold in a single sale, in the opinion of counsel reasonably satisfactory to the Company, without any limitation as to volume or manner of sale pursuant to Rule 144 promulgated under the Securities Act. Upon any transfer or pledge of Registrable Securities other than as set forth in this Section 2(d), such securities shall no longer constitute Registrable Securities.

(ii) Subject to Section 2(b), if a Shareholder assigns its rights under this Agreement in connection with the transfer of less than all of its Registrable Securities, the Shareholder shall retain its rights under this Agreement with respect to its remaining Registrable Securities. If a Shareholder assigns its rights under this Agreement in connection with the transfer of all of its Registrable Securities, such Shareholder shall have no further rights or obligations under this Agreement, except under Section 4 in respect of offerings in which it participated.

3. Registration Procedures

(a) S-3 Registration. Promptly after the date hereof, time being of the essence, the Company shall prepare and file with the Commission a Registration Statement covering the resale of all of the Registrable Securities for an offering to be made on a continuous basis pursuant to Rule 415. The Company shall begin to prepare the Registration Statement within ten (10) days after the date of this Agreement and will perform its best efforts to complete and file the Registration Statement. Such Registration Statement filed hereunder shall be on Form S-3 or, if such form is not available to the Company, Form S-1. Subject to the terms of this Agreement, the Company shall use its commercially reasonable efforts to cause such Registration Statement to be declared effective under the Securities Act as promptly as possible after the filing thereof.

(b) Obligations of the Company. In connection with the registration of Registrable Securities, the Company shall:

(i) prepare and file with the Commission a Registration Statement on any form for which the Company then qualifies or which counsel for the Company shall deem appropriate and which form shall be available for the sale of such Registrable Securities in accordance with the intended method of distribution, and cause such Registration Statement to become effective; provided, however, that before filing a Registration Statement or Prospectus or any amendments or supplements thereto (including, without limitation, any documents incorporated by reference therein), or before using any Free Writing Prospectus, provide one firm of legal counsel selected by Shareholders holding a majority of the Registrable Securities being registered in such registration (“Shareholder Counsel”), any managing underwriter or broker/dealer participating in any disposition of such Registrable Securities pursuant to a Registration Statement and any attorney retained by any such managing underwriter or broker/dealer (each, an “Inspector” and collectively, the “Inspectors”) with an opportunity to review and comment on such Registration Statement and each Prospectus included therein (and each amendment or supplement thereto) and each Free Writing Prospectus to be filed with the Commission, subject to such documents being under the Company’s control. The Company shall notify the Shareholders’ Counsel and each seller of Registrable Securities pursuant to such Registration Statement of any stop order issued or threatened by the Commission and take all reasonable actions required to prevent the entry of such stop order or to remove it if entered;

(ii) promptly prepare and file with the Commission such amendments and supplements to such Registration Statement and the Prospectus used in connection therewith as shall be necessary to keep such Registration Statement effective for the lesser of (x) such period which will terminate when all Registrable Securities covered by such Registration Statement have been sold (or, if such Registration Statement is an Automatic Shelf Registration Statement, on the first anniversary of the date of filing of such Automatic Shelf Registration Statement) or (y) the securities covered by such Registration Statement are no longer Registrable Securities;

(iii) furnish to each seller of Registrable Securities such number of copies of such Registration Statement, each amendment and supplement thereto, the Prospectus included in such Registration Statement (including each preliminary Prospectus), any Prospectus filed under Rule 424 under the Securities Act and any Free Writing Prospectus as each such seller may reasonably request in order to facilitate the disposition of the Registrable Securities owned by such seller; provided that the Company need not provide copies of exhibits to the Registration Statement.

(iv) use its commercially reasonable efforts to expeditiously register or qualify such Registrable Securities under such other securities or “blue sky” laws of California and New York if required by the laws of such states, and continue such registration or qualification in effect in such jurisdiction for as long as permissible pursuant to the laws of such jurisdiction, or for as long as any such seller requests or until all of such Registrable Securities are sold or are “covered securities” under the Securities Act, whichever is shortest, and do any and all other acts and things which may be reasonably necessary or advisable to enable any such seller to consummate the disposition of the Registrable Securities owned by such seller in such jurisdictions; provided, however, that the Company shall not be required to (x) qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(b)(iv), (y) subject itself to taxation in any such jurisdiction or (z) consent to general service of process in any such jurisdiction;

(v) following its actual knowledge thereof, notify each seller of Registrable Securities: (A) when a Prospectus, any Prospectus supplement, any Free Writing Prospectus, a Registration Statement or a post-effective amendment to a Registration Statement has been filed with the Commission, and, with respect to a Registration Statement or any post-effective amendment, when the same has become effective; (B) of any request by the Commission for amendments or supplements to a Registration Statement, related Prospectus or Free Writing Prospectus or for additional information; (C) of the receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Registrable Securities for sale in any jurisdiction or the initiation or threatening of any proceedings for such purpose; and (D) of the existence of any fact or happening of any event of which the Company has knowledge which makes any statement of a material fact in such Registration Statement, related Prospectus or Free Writing Prospectus or any document incorporated or deemed to be incorporated therein by reference untrue or which would require the making of any changes in the Registration Statement, Prospectus or Free Writing Prospectus in order that, in the case of the Registration Statement, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, and that in the case of such Prospectus or Free Writing Prospectus, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, provided that the Company need not disclose any facts or events that have not been publicly disclosed by the Company;

(vi) upon the occurrence of any event contemplated by Section 3(b)(v)(D), as promptly as practicable, prepare a supplement or amendment to such Registration Statement, related Prospectus or Free Writing Prospectus and furnish to each seller of Registrable Securities a reasonable number of copies of such supplement to, or amendment of, such Registration Statement, Prospectus or Free Writing Prospectus as may be necessary so that, after delivery to the purchasers of such Registrable Securities, in the case of the Registration Statement, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, and that in the case of such Prospectus or Free Writing Prospectus, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading;

(vii) enter into and perform customary agreements and take such other actions as are reasonably required in order to facilitate the disposition of such Registrable Securities and shall provide all reasonable cooperation, including causing counsel to the Company to deliver customary legal opinions in connection with any such underwriting agreements;

(viii) make available at reasonable times for inspection by any Inspector all financial and other records, pertinent corporate documents and properties of the Company and its subsidiaries (collectively, the “Records”) as shall be reasonably necessary to enable them to exercise their due diligence responsibility, and cause the Company’s and its subsidiaries’ officers, directors, managers and employees, and the Company’s independent registered public accounting firm, to supply all information reasonably requested by any such Inspector in connection with such Registration Statement. Records that the Company determines, in good faith, to be confidential and which it notifies the Inspectors are confidential shall not be disclosed by the Inspectors (and the Inspectors shall confirm their agreement in writing in advance to the Company if the Company shall so request) unless (x) the disclosure of such Records is necessary, in the Company’s reasonable judgment, to avoid or correct a misstatement or omission in the Registration Statement, (y) the release of such Records is ordered pursuant to a subpoena or other order from a court of competent jurisdiction after exhaustion of all appeals therefrom or (z) the information in such Records was known to the Inspectors on a non-confidential basis prior to its disclosure by the Company or has been made generally available to the public. Each seller of Registrable Securities agrees that it shall, upon learning that disclosure of such Records is sought in a court of competent jurisdiction, promptly give notice to the Company and allow the Company, at the Company’s expense, to undertake appropriate action to prevent disclosure of the Records deemed confidential;

(ix) if such sale is pursuant to an underwritten offering, obtain a “cold comfort” letter dated the effective date of the Registration Statement and the date of the closing under the underwriting agreement from the Company’s independent registered public accounting firm in customary form and covering such matters of the type customarily covered by “cold comfort” letters as the managing underwriter reasonably requests;

(x) furnish, at the request of any seller of Registrable Securities on the date such securities are delivered to the underwriters for sale pursuant to such registration, an opinion, dated such date, of counsel representing the Company for the purposes of such registration, addressed to the underwriters, covering such legal matters with respect to the registration in respect of which such opinion is being given as the underwriters, may reasonably request and are customarily included in such opinions;

(xi) cause any Shares included in the Registration Statement to be listed on each securities exchange on which the Shares are then listed. The Company shall pay all fees and expenses in connection with satisfying its obligation to list such Shares; The Company also represents that it is in compliance with the requirements of the NYSE Amex for continued listing of the Shares. The Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Shares under the Exchange Act or the listing of the Shares on the NYSE Amex, nor has the Company received any notification that the Commission or the NYSE Amex is contemplating terminating such registration or listing. The transactions contemplated by this Agreement will not contravene the rules and regulations of the NYSE Amex. The Company will comply with all requirements of the NYSE Amex with respect to the issuance and listing of the Acquired Shares and shall cause the Acquired Shares to be listed on the NYSE Amex.

- (xii) make all required filings of all Prospectuses and Free Writing Prospectuses with the Commission;
- (xiii) make all required filing fee payments in respect of any Registration Statement or Prospectus used under this Agreement (and any offering covered thereby); and
- (xiv) take all other steps reasonably necessary to effect the registration of the Registrable Securities contemplated hereby

(c) Seller Requirements. In connection with any offering under any Registration Statement under this Agreement, each Shareholder (i) shall promptly furnish to the Company in writing such information with respect to the Shareholder and the intended method of disposition of its Registrable Securities as the Company may reasonably request or as may be required by law or regulations for use in connection with any related Registration Statement or Prospectus (or amendment or supplement thereto) and all information required to be disclosed in order to make the information previously furnished to the Company by the Shareholder not contain a material misstatement of fact or necessary to cause such Registration Statement or Prospectus (or amendment or supplement thereto) not to omit a material fact with respect to the Shareholder necessary in order to make the statements therein not misleading; (ii) shall comply with the Securities Act and the Exchange Act and all applicable state securities laws and comply with all applicable regulations in connection with the registration and the disposition of the Registrable Securities; and (iii) shall not use any Free Writing Prospectus without the prior written consent of the Company. If any seller of Registrable Securities fails to provide such information required to be included in such Registration Statement by applicable securities laws or otherwise necessary or desirable in connection with the disposition of such Registrable Securities, within ten (10) calendar days after written request therefor, the Company may exclude such seller's Registrable Securities from the registration statement.

(d) Notice to Discontinue. Each Shareholder agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 3(b)(v)(D), the Shareholder shall forthwith discontinue disposition of Registrable Securities pursuant to the Registration Statement covering such Registrable Securities until the Shareholder's receipt of the copies of the supplemented or amended Prospectus or Free Writing Prospectus contemplated by Section 3(b)(vi) (or if no supplemental or amended prospectus or Free Writing Prospectus is required, upon confirmation from the Company that use of the Prospectus or Free Writing Prospectus is once again permitted) and, if so directed by the Company, the Shareholder shall deliver to the Company (at the Company's expense) all copies, other than permanent file copies then in the Shareholder's possession, of the Prospectus or Free Writing Prospectus covering such Registrable Securities which is current at the time of receipt of such notice.

(e) Registration Expenses. The Company shall pay all expenses arising from or incident to its performance of, or compliance with, this Agreement, including, without limitation, (i) Commission, filing fees, (ii) all fees and expenses incurred in complying with state securities or “blue sky” laws (including reasonable fees, charges and disbursements of counsel to any underwriter incurred in connection with “blue sky” qualifications of the Registrable Securities as may be set forth in any underwriting agreement), (iii) all printing, messenger and delivery expenses, and (iv) the fees, charges and expenses of counsel to the Company and of its independent registered public accounting firm and any other accounting fees, charges and expenses incurred by the Company (including, without limitation, any expenses arising from any “cold comfort” letters and the reasonable and documented legal fees, charges and expenses of Shareholder’s Counsel and regardless of whether such Registration Statement is declared effective. All of the expenses described in the preceding sentence of this Section 3(e) are referred to herein as “Registration Expenses”.

4. Indemnification; Contribution

(a) Indemnification by the Company. The Company agrees to indemnify and hold harmless the Shareholders, and each of their respective partners, directors, officers, Affiliates, stockholders, members, employees, trustees, legal counsel and accountants and each Person who controls (within the meaning of Section 15 of the Securities Act) any Shareholder, from and against any and all losses, claims, damages, liabilities and expenses, or any action or proceeding in respect thereof (including reasonable costs of investigation and reasonable attorneys’ fees and expenses) (each, a “Liability” and collectively, “Liabilities”), arising out of or based upon (a) in the case of the Registration Statement or in any amendment thereto, any untrue, or allegedly untrue, statement of a material fact or omission, or alleged omission, to state any material fact required to be stated therein or necessary to make the statements therein not misleading; (b) in the case of the Disclosure Package, the Prospectus, any Free Writing Prospectus or in any supplement thereto, any untrue, or allegedly untrue, statement of a material fact or omission, or alleged omission, to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading and (c) any violation or alleged violation by the Company of the Securities Act, the Exchange Act or any state securities law, or any rule or regulation thereunder, in connection with the performance of its obligations under this Agreement; provided, however, that the Company shall not be held liable in any such case to the extent that any such Liability arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission contained in such Disclosure Package, Registration Statement, Prospectus, Free Writing Prospectus or such amendment or supplement thereto solely in reliance upon and in conformity with information concerning any Shareholder furnished in writing to the Company by or on behalf of a Shareholder expressly for use therein, including, without limitation, the information furnished to the Company pursuant to Sections 3(c) and 4(b). The Company shall also provide customary indemnities to any underwriters of the Registrable Securities, their officers, directors and employees and each Person who controls such underwriters (within the meaning of Section 15 of the Securities Act) to the same extent as provided above with respect to the indemnification of the Shareholders.

(b) **Indemnification by Shareholders.** In connection with any offering in which any Shareholder is participating pursuant to this Agreement, each participating Shareholder agrees severally to indemnify and hold harmless the Company, any underwriter retained by the Company and each Person who controls the Company or such underwriter (within the meaning of Section 15 of the Securities Act) to the same extent as the foregoing indemnity from the Company to the Shareholders (including indemnification of their respective partners, directors, officers, Affiliates, stockholders, managers, members, employees, trustees and Controlling Persons), but only to the extent that Liabilities arise out of or are based upon a statement or alleged statement or an omission or alleged omission that was made solely in reliance upon and in conformity with information with respect to such Shareholder furnished in writing to the Company by or on behalf of the Shareholder expressly for use in such Disclosure Package, Registration Statement, Prospectus, Free Writing Prospectus or such amendment or supplement thereto, including, without limitation, the information furnished to the Company pursuant to Section 3(c). In no event shall the liability of a Shareholder hereunder be greater in amount than the net proceeds received by the Shareholder upon the sale of the Registrable Securities giving rise to such indemnification obligation except in the case of fraud by the Shareholder.

(c) **Conduct of Indemnification Proceedings.** Any Person entitled to indemnification or contribution hereunder (the “Indemnified Party”) agrees to give prompt written notice to the indemnifying party (the “Indemnifying Party”) after the receipt by the Indemnified Party of any written notice of the commencement of any action, suit, proceeding or investigation or threat made in writing for which the Indemnified Party intends to claim indemnification or contribution pursuant to this Agreement; provided, however, that the failure to so notify the Indemnifying Party shall not relieve the Indemnifying Party of any Liability that it may have to the Indemnified Party hereunder (except to the extent that the Indemnifying Party is materially prejudiced or otherwise forfeits substantive rights or defenses by reason of such failure). If notice of commencement of any such action is given to the Indemnifying Party as provided in this Section 4(c), the Indemnifying Party shall be entitled to participate in and, to the extent it may wish, jointly with any other Indemnifying Party similarly notified, to assume the defense of such action at its own expense, with counsel chosen by it and reasonably satisfactory to such Indemnified Party. Each Indemnified Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the reasonable and documented out-of-pocket fees and expenses of such counsel shall be paid by the Indemnified Party unless (i) the Indemnifying Party agrees to pay the same, (ii) the Indemnifying Party fails to assume the defense of such action with counsel reasonably satisfactory to the Indemnified Party or (iii) the named parties to any such action (including any impleaded parties) include both the Indemnifying Party and the Indemnified Party and such parties have been advised by such counsel that either (x) representation of such Indemnified Party and the Indemnifying Party by the same counsel would be inappropriate under applicable standards of professional conduct or (y) there may be one or more legal defenses available to the Indemnified Party which are different from or additional to those available to the Indemnifying Party. In any of such cases, the Indemnifying Party shall not have the right to assume the defense of such action on behalf of such Indemnified Party, it being understood, however, that the Indemnifying Party shall not be liable for the reasonable and documented out-of-pocket fees and expenses of more than one separate firm of attorneys (in addition to any local counsel) for all Indemnified Parties and all such reasonable and documented out-of-pocket fees and expenses shall be reimbursed as incurred. No Indemnifying Party shall be liable for any settlement entered into without its written consent, which consent shall not be unreasonably withheld. No Indemnifying Party shall, without the consent of such Indemnified Party, effect any settlement of any pending or threatened proceeding in respect of which such Indemnified Party is a party and indemnity has been sought hereunder by such Indemnified Party, unless such settlement includes an unconditional release of such Indemnified Party from all liability for claims that are the subject matter of such proceeding.

(d) Contribution. If the indemnification provided for in this Section 4 from the Indemnifying Party is unavailable to an Indemnified Party hereunder or insufficient to hold harmless an Indemnified Party in respect of any Liabilities referred to herein, then each Indemnifying Party, in lieu of indemnifying such Indemnified Party, shall contribute to the amount paid or payable by such Indemnified Party as a result of such Liabilities in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party and Indemnified Party in connection with the actions which resulted in such Liabilities, as well as any other relevant equitable considerations. The relative faults of such Indemnifying Party and Indemnified Party shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact, has been made by, or relates to information supplied by, such Indemnifying Party or Indemnified Party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action. The amount paid or payable by a party as a result of the Liabilities referred to above shall be deemed to include, subject to the limitations set forth in Sections 4(a), 4(b), and 4(c), any reasonable and documented out-of-pocket legal or other fees, charges or expenses reasonably incurred by such party in connection with any investigation or proceeding.

(i) The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 4(d)) were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in the immediately preceding paragraph. No Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation. In no event shall a Shareholder be required to contribute an amount under this Section 4(d) in excess of the net proceeds received by the Shareholder upon the sale of the Shareholder's Registrable Securities pursuant to the Registration Statement giving rise to such contribution obligation, except in the case of fraud by the Shareholder.

5. Reports Under Exchange Act

(a) With a view to making available to the Shareholders the benefits of Rule 144 promulgated under the Securities Act and any other rule or regulation of the Commission that may at any time permit the Shareholders to sell Registrable Shares of the Company to the public without registration, the Company agrees for the period of at least one year from the date hereof, to:

- (i) Make and keep public information available, as those terms are used in Rule 144, at all times;
- (ii) File with the Commission in a timely manner all reports and other documents required of the Company under the Exchange Act and the rules and regulations of any applicable securities exchanges;
- (iii) Furnish to the Shareholders, at the Company's expense, so long as the Shareholders own any Registrable Shares, forthwith on request, (i) a written statement by the Company that it has complied with the reporting requirements of Rule 144 and the Exchange Act, and (ii) a copy of the most recent annual or quarterly report of the Company filed under the Exchange Act; and
- (iv) Undertake any additional actions reasonably necessary to maintain the availability of the use of Rule 144 for the resale of the Registrable Securities.

6. Miscellaneous

- (a) Share Splits, etc. The provisions of this Agreement shall be appropriately adjusted for any share dividends, splits, reverse splits, combinations recapitalizations and the like occurring after the date.
- (b) Amendments and Waivers. Except as otherwise provided herein, the provisions of this Agreement may not be amended, modified or supplemented, and waivers or consents to departures from the provisions may not be given unless consented to in writing by the Company and the Shareholders.
- (c) Notices. All notices, demands and other communications provided for or permitted hereunder shall be made in writing and shall be made by United States mail, first class postage prepaid, telecopy, electronic transmission, air courier service or personal delivery:

If to the Company:

BioTime, Inc.
1301 Harbor Bay Parkway, Suite 100
Alameda, California 94502
Attention: Robert W. Peabody, Senior Vice
President, Chief Operating Officer and
Chief Financial Officer
rpeabody@biotimemail.com

with a copy to:
Thompson, Welch, Soroko & Gilbert LLP
235 Pine Street, 13th Floor
San Francisco, California 94104
Attention: Richard S. Soroko
rsoroko@twsglaw.com

If to a Shareholder, at the most recent address for such Shareholder as shown in the Company's register of its stockholders.

All such notices, demands and other communications shall be deemed to have been duly given when delivered by hand, if personally delivered; when delivered by air courier, if delivered by commercial courier service; when receipt is acknowledged, if telecopied, or electronically transmitted, or two Business Days after being deposited in the United States mail, first class postage prepaid. Any party may by notice given in accordance with this Section 6(c) designate another address or Person for receipt of notices hereunder.

(d) Permitted Assignees; Third Party Beneficiaries. This Agreement shall inure to the benefit of and be binding upon the Company and the Shareholders (including the Permitted Assignees and Pledgees of Shareholders as provided in Section 2(d)(i)), and, except as provided in Section 4, no other Person is intended to be a beneficiary of this Agreement.

(e) Counterparts. This Agreement may be executed in any number of counterparts and by the parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

(f) Headings. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning.

(g) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state of California, without regard to the principles of conflicts of law.

(h) Jurisdiction. Any action or proceeding against any party hereto relating in any way to this Agreement or the transactions contemplated hereby may be brought and enforced in the federal or state courts in the State of California, and each party, on behalf of itself and its respective successors and assigns, irrevocably consents to the jurisdiction of each such court in respect of any such action or proceeding. Each party, on behalf of itself and its respective successors and assigns, irrevocably consents to the service of process in any such action or proceeding by the mailing of copies t by registered or certified mail, postage prepaid, return receipt requested, to such person or entity at the address for such person or entity set forth in Section 6(c) or such other address such person or entity shall notify the other in writing. The foregoing shall not limit the right of any person or entity to serve process in any other manner permitted by law or to bring any action or proceeding, or to obtain execution of any judgment, in any other jurisdiction.

(i) Each party, on behalf of itself and its respective successors and assigns, hereby irrevocably waives any objection that it may now or hereafter have to the laying of venue of any action or proceeding arising under or relating to this Agreement or the transactions contemplated hereby in any court located in the State of California or located in any other jurisdiction chosen by the Company in accordance with Section 6(h). Each party, on behalf of itself and its respective successors and assigns, hereby irrevocably waives any claim that a court located in the State of California is not a convenient forum for any such action or proceeding.

(ii) Each party, on behalf of itself and its respective successors and assigns, hereby irrevocably waives, to the fullest extent permitted by applicable United States federal and state law, all immunity from jurisdiction, service of process, attachment (both before and after judgment) and execution to which it might otherwise be entitled in any action or proceeding relating in any way to this Agreement or the transactions contemplated hereby in the courts of the State of California, of the United States or of any other country or jurisdiction, and hereby waives any right he might otherwise have to raise or claim or cause to be pleaded any such immunity at or in respect of any such action or proceeding.

(i) Severability. If any one or more of the provisions contained herein, or the application t in any circumstance, is held invalid, illegal or unenforceable in any respect for any reason, the validity, legality and enforceability of any such provision in every other respect and of the remaining provisions shall not be in any way impaired.

(j) Rules of Construction. Unless the context otherwise requires, references to sections or subsections refer to sections or subsections of this Agreement. Terms defined in the singular have a comparable meaning when used in the plural, and vice versa.

(k) Entire Agreement. This Agreement is intended by the parties as a final expression of their agreement and intended to be a complete and exclusive statement of the agreement and understanding of the parties hereto with respect to the subject matter. There are no restrictions, promises, representations, warranties or undertakings with respect to the subject matter, other than those set forth or referred to herein. This Agreement supersedes all prior agreements and understandings among the parties with respect to such subject matter.

(l) Further Assurances. Each of the parties shall execute such documents and perform such further acts as may be reasonably required or desirable to carry out or to perform the provisions of this Agreement.

(m) Other Agreements. Nothing contained in this Agreement shall be deemed to be a waiver of, or release from, any obligations any party hereto may have under, or any restrictions on the transfer of Registrable Securities or other securities of the Company imposed by, any other agreement.

IN WITNESS WHEREOF, the undersigned have executed, or have caused to be executed, this Registration Rights Agreement on the date first written above.

BIOTIME, INC.

By: _____
Title: Chief Executive Officer

[Name and Address of Transferee]

[Address]

[Name and Address of Transferor]

_____, 20__

Ladies and Gentlemen:

Reference is made to the Registration Rights Agreement, dated as of _____, 2012 (the "Registration Rights Agreement"), by and among BioTime, Inc. a California corporation, and Xennex, Inc. All capitalized terms used herein but not otherwise defined shall have the meanings given to them in the Registration Rights Agreement.

In connection with the transfer by [Name of Transferor] of Registrable Securities with associated registration rights under the Registration Rights Agreement to [Name of Transferee] as transferee (the "Transferee"), the Transferee hereby agrees to be bound as a Shareholder by the provisions of the Registration Rights Agreement as provided under Section 2(d)(i) thereto.

This consent shall be governed by California law.

Yours sincerely,

[Name of Transferee]

By: _____
Name:
Title:

SCHEDULE I

Shareholders

David Warshawsky
Paamoni 2
Tel Aviv 62918
Israel

Yaron Guan-Golan
Flat 8C, Tower 3, The Hermitage
1 Hoi Wang Road, Kowloon
Hong Kong

Kenneth Elsner
9 Kennie Lane
Pembroke, MA 02359

Yeda Research and Development Company, Ltd.
Herzl Street 2
Rehovot, Israel 76100

EXHIBIT F

Opinion of Xennex Counsel

May ___, 2012

BioTime, Inc.
1301 Harbor Bay Parkway, Suite 100
Alameda, CA 94502

Re: Agreement and Plan of Merger, dated as of this date, by and among Xennex, Inc. ("Xennex"); LifeMap Sciences, Inc. ("LifeMap"); BioTime, Inc. ("BioTime"), and the Xennex Stockholders (the "Merger Agreement")

Gentlemen:

You have asked us for our opinion on the matters addressed below. Although we have acted as counsel to Xennex, our representation is limited to matters individually referred to us by Xennex. Specifically, we have acted as counsel to Xennex in connection with the execution and delivery of the Merger Agreement.

For the purpose of rendering the opinions expressed below, we have examined and relied upon originals or copies, certified or otherwise identified to our satisfaction, of such records, agreements, documents, and other instruments, and certificates or comparable documents of public officials and of officers and representatives of Xennex, and have made such inquiries of such officers and representatives as we have deemed necessary. We have assumed the genuineness of all signatures, the conformity to the originals of all documents reviewed by us as copies, the authenticity and completeness of all original documents reviewed by us in original or copy form and the legal competence of each individual executing any document. We have furthermore assumed that LifeMap and BioTime have all requisite power and authority to execute, deliver, and perform the Merger Agreement and the other agreements and instruments to be executed, delivered, or performed by either of them pursuant thereto, that LifeMap and BioTime have duly and validly executed and delivered the Merger Agreement and such other agreements and instruments and that they constitute valid, binding, and enforceable obligations of LifeMap and BioTime.

As to all matters of fact (including factual conclusions and characterizations and descriptions of purpose, intention or other state of mind), we have relied entirely upon representations made to us by the officers of Xennex and have assumed, without independent inquiry, the accuracy of those representations. However, we are not aware of any information which would cause us to question the accuracy of such representations.

When an opinion set forth below is given to the best of our knowledge, or to our knowledge, or with reference to matters of which we are aware or which are known to us, or with another similar qualification, the relevant knowledge or awareness is limited to the actual knowledge or awareness of the individual lawyers in the firm who have participated directly in the specific transactions to which this opinion relates and without any special or additional investigation undertaken for the purposes of this opinion. The opinions expressed herein are based solely on matters of which the individual lawyers in the firm who have participated directly in the matters referred to our firm by management of Xennex have actual knowledge.

Each opinion set forth below relating to the enforceability of any agreement or instrument against Xennex is subject to the following general qualifications:

- (i) as to any instrument delivered by Xennex, we assume that Xennex has received the agreed to consideration therefor;
- (ii) as to any agreement to which Xennex is a party, we assume that such agreement is the binding obligation of each other party thereto;
- (iii) the enforceability of any obligation of Xennex may be limited by bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium, marshaling or other laws and rules of law affecting the enforcement generally of creditors' rights and remedies (including such as may deny giving effect to waivers of debtors' or guarantors' rights);
- (iv) the enforcement of any of your rights may in all cases be subject to an implied duty of good faith and to general principles of equity (regardless of whether such enforceability is considered in a proceeding at law or in equity); and
- (v) no opinion is given herein as to the availability of any specific or equitable relief of any kind or as to the enforceability of any particular remedy provided in the Merger Agreement or any associated agreement or instrument.

In connection with this opinion, we have examined and relied upon the following:

- A. The Merger Agreement;
- B. Articles of Organization (as amended) and By-Laws (as amended) of Xennex;
- C. Unanimous Written Consent of the Shareholders and Directors of Xennex.

Based upon the foregoing, it is our opinion that:

1. Xennex is a corporation duly organized, validly existing and in good standing under the law of Massachusetts, and has all requisite power to own its property and conduct its business as now conducted.

2. The Merger Agreement has been duly authorized and has been duly and validly executed and delivered by or on behalf of Xenex and the execution, delivery and performance of such Merger Agreement is within the power of Xenex and constitutes legal, valid and binding obligations of Xenex and is enforceable in accordance with its terms.

3. To the best of our knowledge, neither the execution, the delivery nor the performance of the Merger Agreement, nor compliance with its terms and provisions will or has conflicted with or resulted in a breach of any of the terms, conditions or provisions of the Articles of Organization (as amended) or By-Laws (as amended) of Xenex or of any law, rule or any regulation, order, writ, injunction, decree, determination or award of any court or governmental instrumentality.

4. To the best of our knowledge, no consent, license, approval or authorization, or registration, declaration or filing with, any court, governmental body or authority or other person or entity is required, in connection with the valid execution, delivery or performance of the Merger Agreement.

This opinion is solely for the benefit of the addressee hereof in connection with the transaction contemplated herein and may not be relied upon by you for any other purpose or by any other person without the undersigned's prior written consent. All of the foregoing opinions are rendered as of the date hereof. We assume no obligation to update such opinions to reflect any facts or circumstances that may hereafter come to our attention or any changes in the law that may hereafter occur.

Very truly yours,

Truelove, Dee & Chase, LLP

EXHIBIT G

Assignment Agreement

ASSIGNMENT OF RESEARCH AND LICENSE AGREEMENTS

This Assignment of Research and License Agreements (this "**Agreement**") is entered into as of May ____, 2012 by and among Yeda Research and Development Company, Ltd ("**Yeda**"), an Israeli corporation, Xennex, Inc. ("**Xennex**"), a Massachusetts corporation, LifeMap Sciences, Inc. ("**LifeMap**"), a California corporation, BioTime, Inc. ("**BioTime**"), a California corporation, and the undersigned stock holders of Xennex ("**Xennex Stockholders**"). Yeda, Xennex, LifeMap, BioTime, and the Xennex Stockholders are sometimes referred to collectively as the "**Parties**".

RECITALS

A. Yeda and Xennex are parties to a certain Research and License Agreement dated June 9, 2003, as amended by the First Amendment dated February 18, 2004, a Second Amendment dated June 29, 2004, a Third Amendment dated November 13, 2004, a Fourth Amendment dated February 17, 2005, a Fifth Amendment dated April 17, 2008, a Sixth Amendment dated August 16, 2010 and a Seventh Amendment dated October 27, 2011 (collectively the "**GeneCards R&L Agreement**") as well as a certain Research and License Agreement dated July 10, 2011 (the "**PanDaTox R&L Agreement**"). (Combined, the GeneCards R&L Agreement and the PanDaTox R&L Agreement shall be termed the "**R&L Agreements**").

B. Xennex desires to assign all its rights and obligations under the R&L Agreements to LifeMap, and LifeMap desires to assume all such rights and obligations, upon the terms and conditions set forth herein.

C. The above mentioned designated assignment of the R&L Agreements from Xennex to LifeMap is derived from the desire of Xennex and LifeMap to merge Xennex into LifeMap (the "**Merger**") and execute a Merger agreement (the "**Merger Agreement**"), and the Parties intend that the Merger Agreement and this Agreement will be executed simultaneously and that this Agreement shall not enter into effect until the date on which the Merger is effective.

D. Xennex and LifeMap desire to obtain the consent of Yeda to the assignment of the R&L Agreements to LifeMap through the Merger and subject to its completion as described in the final draft of the Merger Agreement provided to Yeda.

Now therefore, the parties agree as follows:

AGREEMENT

1. ASSIGNMENT.

1.1 Based on the representations and warranties of Xennex, LifeMap and BioTime, Yeda hereby consents to the assignment of the R&L Agreements from Xennex to LifeMap pursuant to, and upon consummation of, the Merger, subject to the full receipt of the consideration described in Section 2 below. LifeMap hereby agrees to accept such assignment and to assume all of Xennex's right, title, interest and obligations under the R&L Agreements upon consummation of the Merger, and to keep, perform, comply with and fulfill all of the terms and obligations of Xennex under the R&L Agreements, to which it shall be a party instead of Xennex, commencing on and after the consummation of the Merger. For the avoidance of doubt, pursuant to the assignment, LifeMap shall use its commercially reasonable efforts to develop, market and commercialize the technologies licensed under the R&L Agreements, as set forth in the R&L Agreements.

For the avoidance of any doubt, if the full consideration described in Section 2 below is not received by Yeda, Yeda's consent to the assignment, as aforesaid, shall be deemed to be void, and such default shall be deemed to be a material breach of this Agreement, that shall entitle Yeda to terminate this Agreement and the R&L Agreements, without derogating from any other remedy or relief that Yeda is entitled to by virtue of law or agreement.

2. CONSIDERATION.

2.1 In consideration of Yeda's consent to the assignment of the R&L Agreements to LifeMap through the Merger, within ten (10) business days after the Xennex Stockholders receive shares of LifeMap common stock, no par value ("**LifeMap Shares**"), in the Merger, they shall transfer to Yeda a total of [*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission] shares of such LifeMap Shares which will constitute [*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission].

[*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission]

2.2 In addition, as further consideration for Yeda's consent to the assignment of the R&L Agreements to LifeMap through the Merger, the Xennex Stockholders agree that within ten (10) business days after receipt of BioTime common shares, no par value ("**BioTime Shares**"), by them in the Merger, they shall deliver to Yeda a number of such BioTime common shares having a market value of [*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission] as of the "**Closing Date**" (as defined in the Merger Agreement); provided, however, that the assignment of such BioTime common shares to Yeda is subject to the condition that BioTime shall have received from Yeda an investment representation letter, in form attached hereto as **Exhibit B**, duly executed by Yeda, containing representations, warranties, and agreements concerning Yeda's investment intent with respect to such BioTime Shares and the applicable restrictions on transfer under the Securities Act of 1933, as amended (the "**Securities Act**") and applicable state and foreign securities laws. Yeda agrees that the stock certificates evidencing such BioTime Shares shall bear such legends as BioTime may require pertaining to restrictions on transfer under the Securities Act and applicable state and foreign securities laws. All of the above LifeMap Shares and BioTime Shares shall be transferred to Yeda within 10 business days after receipt by the Xennex Stockholders and none of the shares intended for Yeda hereunder shall be held in escrow (notwithstanding the arrangements with the Xennex Stockholders under the Merger Agreement).

2.3 All LifeMap Shares and BioTime Shares held by Yeda shall be subject to and enjoy the same terms and rights as such shares issued to, and held by, the Xennex Stockholders under the Merger Agreement and/or any other agreement as consideration for the merger of Xennex into LifeMap. In addition, Yeda and the Xennex Stockholders shall enter into a Right of First Refusal and Shareholders Agreement, of even date, in the form attached to the Merger Agreement. Yeda shall be entitled to tag-along rights on

(a) any BioTime Shares issued to Xennex Stockholders in the Merger. If any or all of the Xennex Stockholders elect to sell any or all of their BioTime Shares that are subject to Yeda's tag-along rights, after receiving a bona fide binding offer for such shares from a third party (excluding (a) sales of shares on a national securities exchange or in the over-the-counter market or on any electronic trading system, and (b) transfers of shares to any revocable or irrevocable trust), Yeda shall be entitled to sell, under same terms and conditions offered to the Xennex Stockholders, a number of BioTime Shares (the "Tag-Along Shares") equal to the product of (x) the total number of BioTime Shares then beneficially owned by Yeda multiplied by (y) a fraction, the numerator of which shall be the total number of BioTime Shares proposed to be purchased by the third party and the denominator of which shall be the sum of all BioTime Shares beneficially owned by Yeda and the Xennex Stockholders who have elected to participate in the transaction. In the event of a proposed sale of BioTime Shares that are subject to Yeda's tag-along rights by any Xennex Stockholder, such Xennex Stockholder shall provide prompt written notice (the "**Notice**") of the terms of such sale to Yeda. The Notice shall identify the purchaser, the number of shares which the purchaser is seeking to purchase or otherwise acquire, the price contained in the offer and all the other terms and conditions of the offer. In the event an offeror shall modify the offer in any way, the applicable Xennex Stockholder shall send an amended Notice to Yeda. Yeda shall, within **10** days after the date of the Notice, or amended Notice if applicable, is provided, deliver a written notice to the applicable Xennex Stockholder that was the recipient of the offer, which notice shall specify the number of Tag-Along Shares that Yeda wishes to sell pursuant to the offer, and the total number of shares then beneficially owned by Yeda. If Yeda elects to sell fewer than the number of Tag-Along Shares that it is entitled to sell in the proposed sale or does not provide to Xennex Stockholders a written notice of acceptance within such 10 day period, then the Xennex Stockholders shall be able to enter into an agreement for the sale of their shares and Yeda will be treated as having waived their tag-along rights; and

(b) LifeMap Shares held by all LifeMap shareholders in accordance with Section 1.7 of the Right of First Refusal and Shareholder's Agreement. However, to the extent that Section 1.7 of such agreement shall be deleted and/or amended after the date hereof without the express written consent of Yeda, then Yeda shall be entitled to a tag along right vis-à-vis the Xennex Stockholders with respect to any sale by all or any of such Xennex Stockholders of their LifeMap Shares, under the same terms of the tag along right granted in paragraph (a) above, that shall apply mutatis mutandis.

All tag-along rights afforded Yeda, by the Xennex Stockholders, via this Agreement, or any other agreement shall expire (a) after a change in control of LifeMap which is defined as a transfer of ownership in which the new owner obtains a fifty percent or greater ownership interest in LifeMap (for the avoidance of doubt, tag along rights will apply in connection with the transfer that caused the change of control), (b) upon an initial public offering of LifeMap Shares, or (b) LifeMap Shares becoming registered under the Securities Exchange Act of 1934, as amended and being listed for trading on a U.S. national securities exchange or OTC Bulletin Board.

2.4 It is also agreed that all of the shares issued to Yeda shall be transferable to Yeda's "Permitted Transferees" (as defined in that certain Right of First Refusal and Shareholder Agreement of even date, including the Weizmann Institute of Science and/or any employee of the Weizmann Institute of Science, without any restrictions other than approvals required by law and/or by the Right of First Refusal and Shareholder Agreement and the Investment Representation Letter of even date. Permitted Transferees shall be entitled to all of the rights herein (including but not limited to the Tag-Along Rights per Section 2.3 above), provided that the Permitted Assignee executes and delivers to LifeMap a counterpart of the Right of First Refusal and Shareholders Agreement.

3. REPRESENTATIONS OF XENNEX, LIFEMAP AND BIOTIME.

3.1 LifeMap, BioTime and Xennex represent that the Capital Table attached as Exhibit A shows, on a fully diluted basis the number of shares of LifeMap that LifeMap expects will be outstanding or issuable following the consummation of the Merger [*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission] that LifeMap is not a party to any other agreements or arrangements to issue any additional shares in connection with the acquisition of Xennex, and that there will not be an increase to the proportions of the Xennex shares (as designated in the Capital Table) and/or the stock options granted to the Xennex Stockholders in their roles as LifeMap management under this transaction, nor is there an understanding between any of the Parties other than Yeda that such an increase will be made at a later date.

3.2 LifeMap, BioTime and Xennex represent that the Xennex Stockholders will receive reasonable compensation (salaries, bonuses, incentive payments and stock options), for their active roles in managing LifeMap and/or its subsidiaries, subject to employment agreements and stock option agreements and that no other agreements exist that will compensate Xennex or Xennex Stockholders for the transaction contemplated in the Merger Agreement.

3.3 For avoidance of doubt, it is hereby agreed and acknowledged by LifeMap that the income generating royalties to Yeda under the R&L Agreements, shall include any amount received by LifeMap or any Affiliated Entity (as such terms are defined in the R&L Agreements) in connection with the operation of the GeneCards Package, the MalaCards Package or PanDatox Databases Package [*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission] (“Additional Revenue”). Xennex represents that it has paid to Yeda all Sublicensing Fees currently due to be paid to Yeda, under the R&L Agreements up to the date of signature of this Assignment Agreement, including royalties derived from any Additional Revenue, as aforesaid, and that to the best of its knowledge, Yeda has no claim for any unpaid Sublicensing Fees. The Parties agree to cooperate and execute appropriate amendments to the R&L Agreements to implement the above, however, in any event that such amendments are not signed, for any reason, the aforesaid, shall be deemed to be the mutual current understanding of the parties, and shall serve as such amendments.

4. CONTINUATION OF R&L AGREEMENTS.

4.1 Subject to Section 1 above, Yeda and Xennex hereby represent and warrant to LifeMap and BioTime that the R&L Agreements are currently in full force and effect and there are no known breaches of either of the R&L Agreements by any of the parties thereto, and that no known event has occurred that, with the giving of notice or passage of time or both would entitle Yeda to terminate either of the R&L Agreements.

4.2 It is hereby acknowledged and agreed that nothing in this Agreement, or the Right of First Refusal and Shareholders Agreement, or LifeMap's articles of incorporation or bylaws, or any other agreement between LifeMap shareholders, shall derogate from the rights and remedies of Yeda under any of the R&L Agreements (as may be amended or supplemented). It is furthermore acknowledged and agreed that Yeda's rights and obligations as a LifeMap shareholder (including, without limitations, any obligation of Yeda, as a shareholder of LifeMap and not as a licensor under the R&L Agreements, to vote in favor of any merger or consolidation of LifeMap or any sale of LifeMap assets, or any change of LifeMap's business) shall not adversely affect Yeda's rights under the R&L Agreements and any such vote or other action shall not estop Yeda from exercising its rights and remedies under the R&L Agreements.

5. GOVERNING LAW AND JURISDICTION.

5.1 This Agreement shall be governed in all respects by the laws of the State of Israel and the courts of Tel Aviv shall have exclusive jurisdiction over any disputes arising hereunder.

5.2 Without prejudice to the right of Yeda to make service in any other manner permitted by law, LifeMap, BioTime, Xennex Stockholders and Xennex (if then existed):

5.2.1 Appoint Mr. David Warshawsky of Paamoni 2, Tel Aviv as their agent for service of process in relation to any suit or proceedings before the Israeli courts in connection with this Agreement;

5.2.2 Agree to maintain such an agent for service of process in Israel or if such appointment of David Warshawsky ceases to be effective for any of them, appoint another person in Israel to accept service of process on its behalf in Israel and notify Yeda in writing of such new appointment, within 5 (five) business days.

6. MISCELLANEOUS.

6.1 Yeda here by agrees that Xennex, LifeMap or any parent company may disclose the terms of this Agreement and the R&L Agreements to the extent required under the securities or other disclosure laws and regulations of any country or state or the rules and regulations of any securities exchange or electronic securities trading system. If time permits, a draft of any planned public disclosure, (other than disclosure that repeats or restates prior approved public disclosure), will be provided to Yeda for its review and comment. If Xennex, LifeMap or a parent company files a copy of this Agreement or the R&L Agreements with the Securities and Exchange Commission or any similar state or foreign regulatory agency as an exhibit to any registration statement, application, or report, they shall submit to such agency an application for confidential treatment seeking permission to redact from such filing the principal financial terms of this Agreement or the R&L Agreements and the names of scientists included in the R&L Agreements and any other information reasonable requested by Yeda; provided, however, that Xennex, LifeMap or a parent company may disclose financial terms of this Agreement or the R&L Agreements in any such registration statement, application, or report to the extent they determine in good faith that doing so is necessary to make any statements contained therein not misleading

6.2 This Agreement and the attached Exhibits constitute the full and entire understandings and agreements among the parties with regard to the subject matter of this Agreement and in any case of a conflict with regard to such subject matter with other agreements (including the articles of incorporation or bylaws of BioTime or LifeMap), the understandings and agreements herein shall prevail. This agreement may be amended only by a written document signed by all the Parties.

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

XENNEX, INC.

By: _____

Title: _____

YEDA RESEARCH AND DEVELOPMENT COMPANY, LTD.

By: _____

LIFEMAP SCIENCES, INC.

By: _____

Title: _____

BIOTIME, INC.

By: _____

Title: _____

XENNEX STOCKHOLDERS:

David Warshawsky

Kenneth Elsner

Yaron Golan

Stockholder	Value in \$	Number of Shares	Price per Share	Percentage
BioTime				
Current LifeMap Option Holders				
BioTime ⁽¹⁾				
Xennex				
[*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission]				
Option (new)				
Total				

(1) Conversion from Xennex BTX

New Option Pool

[*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission]			
	Number	% of Company	% of New Option Pool
New Option Pool			
[*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission]			

Total BioTime [*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission]

[Yeda letterhead]

May __, 2012

LifeMap Sciences, Inc.
BioTime, Inc.
1301 Harbor Bay Parkway
Alameda, CA94502

RE: Receipt of Stock

Ladies/Gentlemen:

In connection with the merger of XenneX, Inc. (**Xennex**) with and into LifeMap Sciences, Inc. (**LifeMap**), stockholders of Xennex have agreed to transfer to us, Yeda Research and Development Company, Ltd., [* certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission] BioTime, Inc. common shares, no par value (**BioTime Shares**) and [* certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission] shares of LifeMap common stock, no par value (**LifeMap Shares**) in consideration for our consent to the assignment, by way of the merger with LifeMap, of Xennex's rights under that certain Research and License Agreements with us. In that regard and in connection with the consent of BioTime and LifeMap to the transfer of the BioTime Shares and LifeMap Shares to us, we represent and warrant to, and agree with, BioTime and LifeMap as follows:

1. We and our attorneys, accountants, and financial advisors have been provided with a reasonable opportunity to make an investigation of BioTime and LifeMap in connection with the receipt of the BioTime Shares and LifeMap Shares. In this regard, we have also received a copy of BioTime's Annual Report on Form 10-K for the year ended December 31, 2011 and a copy of its proxy statement for its last annual meeting of shareholders.

2. We understand that the BioTime Shares and LifeMap Shares are being offered and sold without registration under the United States Securities Act of 1933, as amended (the **Securities Act**), or registration or qualification under the California Corporate Securities Law of 1968, the laws of other states of the United States, or under the laws of any other state or jurisdiction, in reliance upon the exemptions from such registration and qualification requirements for non-public offerings. We acknowledge and understand that the availability of the aforesaid exemptions depends in part upon the accuracy of certain of the representations, declarations, and warranties contained herein, which we are making with the intent that they may be relied upon by BioTime and LifeMap and their respective directors and officers. We understand and acknowledge that no United States federal, state, or other agency has reviewed or endorsed the offer or sale of the BioTime Shares and LifeMap Shares or made any finding or determination as to the fairness of the offering or sale of the BioTime Shares and LifeMap Shares.

3. We, either alone or together with our attorneys, accountants, and financial advisors, have such knowledge and experience in financial and business matters to enable us to evaluate the merits and risks of the ownership of the BioTime Shares and LifeMap Shares.

4. We are receiving the BioTime Shares and LifeMap Shares solely for our own account and not with a view to resale or distribution except as described in paragraph 6 below.

5. It has never been represented, guaranteed, or warranted to us by BioTime, Inc., LifeMap, Xenex, or by any officer, director, shareholder, employee, or agent of BioTime, Inc., LifeMap, or Xenex that we will realize any specific value, sale price, or profit as a result of our ownership of the BioTime Shares and LifeMap Shares

6. We shall not sell, offer for sale, transfer, or assign any of our BioTime Shares or LifeMap Shares in any manner unless those BioTime Shares or LifeMap Shares have been registered under the Securities Act, or unless there is an exemption from such registration and (i) in the case of a transfer of BioTime Shares, an opinion of counsel acceptable to BioTime and its transfer agent, and (ii) in the case of a transfer of LifeMap Shares, an opinion of counsel acceptable to LifeMap, has been rendered, in each case stating that such offer, sale, transfer, or assignment will not violate the Securities Act. BioTime and LifeMap shall pay the fees of their respective counsel incurred in issuing such opinions. **Notwithstanding the above, a transfer or assignment of either the BioTime Shares or LifeMap Shares to a "Permitted Assignee" (as defined in the Registration Rights Agreement of even date) shall be permitted provided that such Permitted Assignee agrees to be bound by the provisions of this letter.**

7. We acknowledge that the certificates evidencing the BioTime Shares and LifeMap Shares to be issued to us will contain the following legend or a similar legend as may be utilized by the transfer agent of BioTime Shares at the time of issuance:

THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. THE SHARES HAVE BEEN ACQUIRED FOR INVESTMENT AND MAY NOT BE SOLD, TRANSFERRED, OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THESE SHARES UNDER THE SECURITIES ACT OF 1933 OR AN OPINION OF THE COMPANY'S COUNSEL THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT.

8. We acknowledge that other than as provided in Section 6 above, BioTime and LifeMap, respectively, will not permit the registration of the transfer of any of the BioTime Shares and LifeMap Shares, and BioTime will issue instructions to the transfer agent and registrar of the BioTime Shares to refuse to register the transfer of any BioTime Shares, not made pursuant to registration under the Securities Act, or pursuant to an available exemption from registration under the Securities Act.

Very truly yours,

Yeda Research and Development Company, Ltd

Date

By: _____

Title: _____

We hereby acknowledge and confirm the aforesaid:

BioTime, Inc.

By: _____

Title: _____

LifeMap Sciences, Inc.

By: _____

Title: _____

EXHIBIT H

Amendment of R&L Agreements

EIGHTH AMENDMENT TO LICENCE AGREEMENT

Between

YEDA RESEARCH AND DEVELOPMENT COMPANY LIMITED

a company duly registered under the laws of Israel of P O Box 95,
Rehovot 76100, Israel

(hereinafter, "**Yeda**")

and

LIFEMAP SCIENCES, INC.

a company duly registered under the laws of the State of California, USA,
having its principal place of business at 1301 Harbor Bay Parkway, Suite 100 Alameda, California 94502USA

(hereinafter, "**LifeMap**")

WHEREAS:

- (A) Yeda and Xennex, Inc. ("**Xennex**") are parties to a certain Research and Licence Agreement dated June 9, 2003 ("**the Original Agreement**"), as amended by the First Amendment dated February 18, 2004, a Second Amendment dated June 29, 2004, a Third Amendment dated November 13, 2004, a Fourth Amendment dated February 17, 2005, a Fifth Amendment dated April 17, 2008, a Sixth Amendment dated: August 16, 2010, and a Seventh Amendment dated: October 27, 2011 (all of the above, collectively, "**the R&L Agreement**"); and
 - (B) Xennex has recently merged into LifeMap, pursuant to a Merger Agreement, dated April 19, 2012 Pursuant to the merger, the License granted to Xennex under the R&L Agreement was assigned to LifeMap under an Assignment Agreement, dated: [___], entered into by Yeda, LifeMap, Xennex, the Xennex' shareholders and BioTime, Inc., the parent company of LifeMap.
 - (B) Pursuant to such merger and assignment, LifeMap wishes to increase the Research Budget for the following 3 years of Research, and as a result, Yeda, Xennex and the Scientists wish to amend the "Royalties versus Research Budget" allocation that was recently agreed upon in the Seventh Amendment, and to make some further amendment to the R&L Agreement, as herein set forth.
-

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. Capitalised terms in this Amendment (“**this Amendment**”) which are defined in the R&L Agreement shall have the same meaning attributed to them therein, unless otherwise defined in this Amendment.
2. The preamble hereto shall form an integral part of this Amendment.
3. The R&L Agreement and this Amendment shall be read as one and shall represent the complete current understanding between the parties with respect to the subject matters hereof and thereof.
4. Subject only to the modifications contained herein, the provisions of the R&L Agreement shall remain unaltered and in full force and effect.

Additional Budget

5. It is hereby agreed that [*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission] will be added to the Research Budget, and such additional amount (“**the Additional Budget**”), will be paid to Yeda, during a period of 3 (three) years, beginning on January 1, 2013 and ending on December 31, 2015 [*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission].

Amendment of “Royalties Vs. Research Budget Allocation”

6. In view of the Additional Budget, the allocation of “Royalties versus Research budget” under the R&L Agreement as described in the Seventh Amendment Agreement, shall be replaced by the following table:

	Aggregate Sublicensing Fee and any additional royalties generating income in thousand US Dollars	Royalties	Research	LifeMap	Total Research Budget in US Dollars
1	[*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission]				
2					
3					
4					

(Rows 3 – 4 in the above table, hereinafter: “**the New Allocation**”)

At the end of the above mentioned three (3) year period the previous allocation, as detailed in the Seventh Amendment will be reinstated.

6. For the avoidance of doubt, nothing herein contained shall derogate from (i) the provisions of the R&L Agreement (and in particular, from the provisions of the Sixth Amendment) with respect to Sublicensing Fees that [*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission]; and (ii) from LifeMap's payment obligations under the R&L Agreement.
7. It is hereby agreed that Yeda shall hold all royalties paid by LifeMap that [*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission] until the end of each calendar year during the term of the License, if applicable. Thereafter, Yeda shall allocate to the Institute the suitable amount designated for Research, and the suitable amount designated for royalties, in accordance with the New Allocation, as described in the above table. If there is an additional sum to be transferred to the Institute, pursuant to the calculation described in the above table, Yeda shall transfer it to the Institute no later than March 1st, after each relevant calendar year.

Permitted Disclosure

8. Section 12.3 of the Original Agreement is hereby amended by inserting the following phrase at the bottom of this section: "notwithstanding anything herein to the contrary, Xennex, LifeMap or any parent company may disclose the terms of this Agreement to the extent required under the securities or other disclosure laws and regulations of any country or state or the rules and regulations of any securities exchange or electronic securities trading system. If time permits, a draft of any planned public disclosure, other than disclosure that repeats or restates prior approved public disclosure, will be provided to Yeda for its review and comment. If Xennex or a parent company files a copy of this Agreement with the Securities and Exchange Commission or any similar state or foreign regulatory agency as an exhibit to any registration statement, application, or report, they shall submit to such agency an application for confidential treatment seeking permission to redact from such filing the principal financial terms of this Agreement and the names of scientists included in this Agreement; provided, however, that Xennex or a parent may disclose financial terms of this Agreement in any such registration statement, application, or report to the extent they determine in good faith that doing so is necessary to make any statements contained therein not misleading.

Royalties generating Income

9. For avoidance of doubt, it is hereby agreed and acknowledged by LifeMap that the income generating royalties to Yeda under the R&L Agreement, shall include any amount received by LifeMap or any Affiliated Entity or any Sublicensee, other than Sublicense Fees, in connection with the operation of the GeneCards Package, including without limitation amounts received in connection with third party advertisements (including by way of link or deep link to another website) or from broker commissions for the sale of products or services ("**Additional Revenue**").
-

All provisions of the R&L Agreement applying to “Sublicensing Fees” shall apply to the Additional Revenues, *mutatis mutandis*.

Bundle sales of GeneCards and MalaCards

10. Pursuant to the Research and License Agreement, dated: [] (“**the MalaCards Agreement**”), recently entered into by Yeda and LifeMap in respect of the MalaCards Package (as such term defined therein), it is anticipated that the GeneCards Package may be sublicensed to the customers in a package with the MalaCards Package (“**the Bundle Package**”). Therefore, is agreed that Invoices in respect of Sublicensing Fees received for a “Bundle Package” shall be detailed as follows:

[*Certain information has been omitted under a request for confidential treatment, and the omitted information has been filed with the Commission

It is agreed that in the event of sublicensing of Bundle Packages, the financial reports that are required under clause 9 of the R&L Agreement will be separated into two separated reports: one for the MalaCards Package and one for the GeneCards Package, and the allocation of amounts will be made in accordance with the Ratio, so that Yeda will be able to detect the amounts of royalties that should be attributed to each.

For the avoidance of doubt, all other terms and conditions of payment shall continue to apply subject to the aforesaid deviation, and *mutatis mutandis*.

IN WITNESS WHEREOF, the parties have duly executed this Eighth Amendment as of the _____ day of May, 2012.

for **YEDA RESEARCH AND DEVELOPMENT COMPANY
LIMITED**

for **LIFEMAP SCIENCES, INC.**

Signature: _____

Signature: _____

Name _____

Name: _____

Title _____

Title: _____

FIRST AMENDMENT TO LICENCE AGREEMENT

Between

YEDA RESEARCH AND DEVELOPMENT COMPANY LIMITED

a company duly registered under the laws of Israel of P O Box 95,
Rehovot 76100, Israel

(hereinafter, "**Yeda**")

and

LIFEMAP SCIENCES, INC.

a company duly registered under the laws of the State of California, USA,
having its principal place of business at 1301 Harbor Bay Parkway, Suite 100 Alameda,
California 94502USA

(hereinafter, "**LifeMap**")

WHEREAS:

- (A) Yeda and Xennex, Inc. ("Xennex") are parties to a certain Research and Licence Agreement dated July 10, 2011 ("**the R&L Agreement**"); and
- (B) Xennex has recently merged into LifeMap, pursuant to a Merger Agreement, dated April 19, 2012. Pursuant to the merger, the License granted to Xennex under the R&L Agreement was assigned to LifeMap under an Assignment Agreement, dated: [____], entered into by Yeda, LifeMap, Xennex, the Xennex' shareholders and BioTime, Inc., the parent company of LifeMap.
- (C) Yeda, Xennex and the Scientists wish to amend Clause 12.3, subject to all terms and conditions herein set forth.

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. The preamble hereto shall form an integral part of this Amendment.
-

3. The R&L Agreement and this Amendment shall be read as one and shall represent the complete current understanding between the parties with respect to the subject matters hereof and thereof.
4. Subject only to the modifications contained herein, the provisions of the R&L Agreement shall remain unaltered and in full force and effect.
5. Section 12.3 of the Original Agreement is hereby amended by inserting the following phrase at the bottom of this section: “notwithstanding anything herein to the contrary, Xennex, LifeMap or any parent company may disclose the terms of this Agreement to the extent required under the securities or other disclosure laws and regulations of any country or state or the rules and regulations of any securities exchange or electronic securities trading system. If time permits, a draft of any planned public disclosure, other than disclosure that repeats or restates prior approved public disclosure, will be provided to Yeda for its review and comment. If Xennex or a parent company files a copy of this Agreement with the Securities and Exchange Commission or any similar state or foreign regulatory agency as an exhibit to any registration statement, application, or report, they shall submit to such agency an application for confidential treatment seeking permission to redact from such filing the principal financial terms of this Agreement and the names of scientists included in this Agreement; provided, however, that Xennex or a parent may disclose financial terms of this Agreement in any such registration statement, application, or report to the extent they determine in good faith that doing so is necessary to make any statements contained therein not misleading.

IN WITNESS WHEREOF, the parties have duly executed this First Amendment as of the _____ day of May, 2012.

for YEDA RESEARCH AND DEVELOPMENT COMPANY LIMITED

for LIFEMAP SCIENCES, INC.

Signature: _____

Signature: _____

Name _____

Name: _____

Title _____

Title: _____

EXHIBIT I

Shareholders Agreement

RIGHT OF FIRST REFUSAL AND SHAREHOLDERS AGREEMENT

THIS RIGHT OF FIRST REFUSAL AND SHAREHOLDERS AGREEMENT (this "Agreement") is entered into as of May ____, 2012, by and among LifeMap Sciences, Inc., a California corporation (the "Company") and the shareholders of the Company listed on Schedule A (each, a "Shareholder" and collectively, the "Shareholders").

In consideration of the mutual promises and covenants set forth herein, and for other consideration, the receipt and adequacy of which are hereby acknowledged, the Shareholders and the Company hereby agree as follows:

ARTICLE 1 SALES BY SHAREHOLDERS

1.1 **Notice of Purchase Offers.** Should any Shareholder or Permitted Transferee (as defined below) (in each case a "Selling Shareholder") propose to accept one or more bona fide offers (collectively, the "Purchase Offer") from any person or persons to purchase all or a portion of the common shares, no par value, of the Company ("Common Stock") or shares of any other class or series of the Company that the Selling Shareholder now owns or may hereafter acquire through any stock split, stock dividend, or recapitalization or reclassification of the Common Stock ("Other Stock"), then the Selling Shareholder shall promptly notify the Company and each Shareholder of the terms and conditions of such Purchase Offer (the "Notice") at least thirty (30) days prior to the closing of such sale or transfer (collectively "Transfer"). The Notice shall describe in reasonable detail the proposed Transfer including, without limitation, the number of shares of each class or series to be sold or transferred (the "Offered Shares"), the nature of such sale or transfer, the consideration to be paid, and the name and address of each prospective purchaser or transferee.

1.2 **Company Right of First Refusal.** The Company shall have the right, upon written notice to the Selling Shareholder given within twenty (20) days after receipt of the Notice of the Purchase Offer, to purchase any or all the Offered Shares on the same terms and conditions as the Purchase Offer.

1.3 **Shareholder Right of First Refusal.** In the event that the Company does not exercise its right pursuant to Section 1.2 with respect to all of the Offered Shares, the Selling Shareholder shall notify each other Shareholder (each a "Non-Selling Shareholder") in writing of the Company's failure to so exercise its right with respect to the shares being sold, and each Non-Selling Shareholder shall have the right, exercisable within twenty (20) days after receipt of such Notice, to purchase the remaining Offered Shares on the same terms and conditions as specified in the Notice.

(a) Each Non-Selling Shareholder may purchase all or any part of its pro rata share of the remaining Offered Shares specified in the Notice. If any Non-Selling Shareholder fails to elect to fully participate in such purchase pursuant to this Section, the Selling Shareholder shall give notice of such failure to the Non-Selling Shareholders who did so elect (the "Participants"). The Participants shall have five (5) days from the date such notice was given to agree (which may be done by telephone and subsequently confirmed in writing) to purchase all or any part of their pro rata share of the unsold portion of the Offered Shares; provided, however, that if any Participant fails to purchase its full pro rata share of the unsold portion of the Offered Shares, any other Participant may purchase some or all of such Participant's pro rata share. For purposes of this paragraph, a Non-Selling Shareholder's or Participant's pro rata share shall be the ratio of (x) the number of shares of Common Stock or Other Stock (as applicable based on whether the right is being exercised with respect to Common Stock or Other Stock) held by such party to (y) the total number of shares of Common Stock or Other Stock (as applicable based on whether the right is being exercised with respect to Common Stock or Other Stock) held by all of the Non-Selling Shareholders and/or Participants (as applicable).

(b) The purchase of the shares shall take place within twenty (20) days of the Company's election to purchase the Offered Shares pursuant to Section 1.2, or the Company's and/or Participants' election to purchase the Offered Shares, whichever is later, or at such other time as is mutually agreed to by the Selling Shareholder, the Company and the Participants. The Selling Shareholder shall deliver to the Company and/or Participants electing to purchase the shares offered by the Selling Shareholder stock certificates, evidencing the Common Stock or Other Stock being sold, duly endorsed for transfer to the purchaser(s) against payment of the purchase price by check for good funds or wire transfer to the Selling Shareholder's account.

(c) In the event that the Company and/or the Participants fail to agree to purchase all of the Offered Shares pursuant to Section 1.2 and Section 1.3 within the period set out above, such Selling Shareholder shall have sixty (60) days after the expiration of the above period to sell all of the Offered Shares to the Buyer at the price and upon terms and conditions no more favorable to the Buyer than specified in the Notice pursuant to this Section 1.3. In the event that such Selling Shareholder has not sold all of the Offered Shares to the Buyer within sixty (60) days after the expiration of the above period, as applicable, or wishes to transfer any such shares at a price per share which is lower than that set forth in the notice, or upon terms different from those previously offered to the Company and the Participants, then such Selling Shareholder shall not thereafter sell any shares without first offering such shares to the Company and the Participants in the manner provided above. In the event that the above transactions require approval of the Company's Board of Directors under applicable law, the Parties all agree to cause the Company's Board of Directors to approve accordingly.

1.4 **Ongoing Rights.** The exercise or non-exercise of the first-refusal rights of the Shareholder hereunder shall not adversely affect the rights of such Shareholder to participate in subsequent purchases or sales by any Selling Shareholder pursuant to this Article 1.

1.5 **Permitted Exemptions.** Subject to Section 1.6, the rights of the Company pursuant to Section 1.2 and the rights of the Shareholders pursuant to Section 1.3 and Section 1.7 shall not apply to (a) any pledge made by a Shareholder pursuant to a bona fide loan transaction which creates a mere security interest or a sale by the secured party to realize upon collateral upon a default by the Shareholder in the payment of the loan, (b) any sale or transfer to the Company except that Section 1.7 shall apply to purchases by the Company through the exercise of its rights under Section 1.2, (c) any transfer by will or the laws of descent, (d) any transfer to the ancestors or descendants or spouse of a Shareholder or a trust for their benefit, (e) any transfer to or from a revocable intervivos trust of which a Shareholder is a settlor and beneficiary, (f) any sale or transfer to BioTime, Inc. or to any subsidiary or parent of BioTime, Inc., (g) any transfer by BioTime, Inc. pro rata to its shareholders of record as of a date determined by BioTime, Inc., (h) any sale or transfer to an Affiliate of a Shareholder or to employees of the Shareholder or such Shareholder's Affiliate (which, for the avoidance of doubt, in the case of Yeda, shall include the Weizmann Institute of Science and/or any employee of the Weizmann Institute of Science) or (i) any sale or exchange pursuant to any offer made to purchase all of the shares owned by all Shareholders if the price per share and payment terms offered are the same for all Shareholders. Any transferee of shares under this Section shall be a "Permitted Transferee."

1.6 **Transferees Bound.** Permitted Transferees of shares under clauses (c), (d), (e), (f) and/or (h) of Section 1.5, and each purchaser of shares from a Selling Shareholder pursuant to an offer to which Sections 1.2 and 1.3 apply, shall take the Shareholder's shares subject to the obligations of the Shareholder and rights of the Company and other Shareholders under this Agreement with respect to any subsequent sale or other transfer of the shares received from the transferring Shareholder. It shall be a condition of any transfer of shares of Common Stock or Other Stock that the transferee, other than a Permitted Transferee that is already a party to this Agreement or a Permitted Transferee under clause (b), (g), or (h) of Section 1.5, executes a counterpart of this Agreement or an undertaking (in a form approved by the Company) to observe and perform the provisions and obligations of this Agreement, and furnishes such counterpart or undertaking to the Company. In the absence of such counterpart or undertaking being executed and furnished to the Company, a transfer shall be null and void and the transferee shall not be recognized by the Company as the holder or owner of the shares which are subject of such transfer for any purpose (including, without limitation, voting or dividend rights).

1.7 **Tag Along Right.** Each Non-Selling Shareholder who does not elect to purchase Offered Shares under Section 1.3 ("Entitled Shareholder") shall have the option, exercisable by written notice to the Selling Shareholder, within 10 business days after receipt of the Notice, to require the Selling Shareholder to provide as part of its proposed Transfer, that such Entitled Shareholder be given the right to participate and Transfer up to such Entitled Shareholder's Tag Along Ratio. For purposes of this Section 1.7, the Entitled Shareholder's "Tag Along Ratio" shall be determined with respect to each class of stock proposed to be Transferred by multiplying the total number of shares of such class proposed to be Transferred in the proposed transaction by a fraction, the numerator of which is the number of shares of such class owned by such Entitled Shareholder and the denominator of which is the total number of issued and outstanding shares of such class held by the Selling Shareholder and all Entitled Shareholders who have elected to participate in such Transfer. The Tag Along Ratio of Common Stock or Other Stock held by each Entitled Shareholder who elects to participate in the Transfer shall be included in the shares being Transferred to the proposed transferee or sold to the Company or other Shareholders under Sections 1.2 and 1.3, and the number of shares of Common Stock or Other Stock, as applicable, that may be Transferred in the transaction by the Selling Shareholder shall be reduced by the number of shares of the Entitled Shareholders so included. The exercise of tag along rights by Entitled Shareholders shall not increase the number of shares that the proposed transferee must acquire in the Transfer. For the avoidance of doubt, such Transfer shall be also subject to the right of first refusal under Sections 1.2 and 1.3, provided however that each of the Shareholders shall be required to elect, within a period of 10 business days after the Notice is given, to exercise only their rights under Section 1.3 or under this Section 1.7 with respect to a proposed Transfer. Any changes or amendments to this Section 1.7 shall require the unanimous written approval of all of the Shareholders.

ARTICLE 2
Other Restrictions on Transfer; Shareholders Consent

2.1 **Additional Restrictions on the Transfer.** The Shareholders agree not to offer or sell any shares of Common Stock or Other Stock to any person or entity that is engaged, directly or indirectly through one or more intermediaries or controlled entities, in the research, development, production, or sale of human therapeutic products using human embryonic stem cell or induced pluripotent stem cells or related technology, unless such offer or sale has been approved by the a majority of the directors of the Company other than the Shareholder(s) intending to so transfer or sell Common Stock or Other Stock.

2.2 **Changes in Stock.** If, from time to time during the term of this Agreement, (a) there is a dividend of any security, stock split, recapitalization, reclassification of shares, or other change in the character or amount of any of the outstanding Common Stock or Other Stock, or (b) there is any consolidation or merger immediately following which shareholders of the Company hold more than 50% of the voting equity securities of the surviving corporation, then, in such event, any and all new, substituted or additional capital stock or other securities which any Shareholder or Permitted Transferee receives through such transaction on account of ownership of shares Common Stock or Other Stock shall be immediately subject to the provisions of this Agreement with the same force and effect as the shares currently held by any Shareholder presently subject to this Agreement.

2.3 **Amendment of Corporate Documents.** Notwithstanding anything to the contrary in this Agreement, in the Company's Articles of Incorporation and in the Company's Bylaws, the adoption of any action or resolution amending or altering Article VII of the Company's Bylaws, as in affect as of the date hereof, in such manner that would eliminate or limit the right of Shareholders to examine or receive copies of corporate records and financial statements as currently provided under such Article VII , shall require the vote or written consent of 80% of the holders of shares affected by such amendment or alteration.

2.4 **Special Resolutions.** Notwithstanding anything to the contrary in this Agreement, in the Company's Articles of Incorporation and in the Company's Bylaws the prior affirmative vote or written consent of the holders of 80% of the then-outstanding shares of Common Stock and Other Stock shall be required for any sale, provision of exclusive license, transfer or assignment of all or substantially all of the Company's rights (including intellectual property rights) in and to Company's Research and License Agreement (the "R&L Agreement") entitling the Company to commercialize its GeneCards data base, if such sale, license, transfer or assignment is proposed to be made to any Affiliate of the Company; provided, however, that this Section 2.4 shall not apply to a sale, license, transfer or assignment to a subsidiary controlled by the Company or by means of a merger or consolidation of the Company with an Affiliate if the Company is the surviving corporation or if the Shareholders have dissenter's rights of appraisal with respect to the merger or consolidation.

For the avoidance of doubt, this provision, along with any other provision in this agreement, remains subject to the Company's obligations under the R&L Agreement.

As used in this Agreement, "Affiliate" means, with respect to a Shareholder, any corporation, limited liability company, partnership, or other business entity or any natural person controlled by, in control of, or under common control with that Shareholder.

ARTICLE 3 Drag Along Rights

3.1 Drag Along Right.

(a) **Actions to be Taken.** In the event that the Board of Directors of the Company and the holders of a majority of the outstanding shares of voting stock of the Company approve (a) a merger or consolidation of the Company with or into another corporation, limited liability company, or other business entity, (b) the conversion of the corporation into another form of business entity or into a corporation of another state, or (c) a sale of all or substantially all of the assets of the Company (any such transaction being referred to herein as a "Sale of the Company"), then each Shareholder hereby agrees, with respect to all shares of Common Stock and Other Stock which the Shareholder own(s) or over which the Shareholder otherwise exercises voting or dispositive authority, to do the following:

(i) to be present, in person or by proxy, as a holder of shares of voting securities, and be counted for the purposes of determining the presence of a quorum, at all meetings of shareholders at which a Sale of the Company is to be brought to a vote of shareholders, provided, that the Shareholder receives lawful notice of the meeting;

(ii) to vote in person or by proxy at a meeting of shareholders, or by written consent if the Board of Directors requests that the Shareholders approve the action by written consent without a meeting, all of the Shareholder's shares of Common Stock and Other Stock in favor of such Sale of the Company and in opposition to any and all other proposals that could reasonably be expected to delay or impair the ability of the Company to consummate such Sale of the Company;

(iii) to refrain from exercising any dissenters' rights or rights of appraisal under applicable law at any time with respect to such Sale of the Company; and

(iv) if the Sale of the Company is structured as a sale of stock of the Company, to sell the Shareholder's shares of Common Stock and Other Stock on the terms and conditions approved by the Company and Shareholders holding a majority of the voting stock of the Company.

(b) **Exceptions.** Notwithstanding the foregoing, a Shareholder will not be required to comply with paragraph (a) of this Section 3.1 in connection with any proposed Sale of the Company (the "Proposed Sale") unless:

(i) in the case of a Shareholder who owns less than 25% of the outstanding shares of any class of voting stock and who is not a director or executive officer of the Company, any representations and warranties to be made by such Shareholder in connection with the Proposed Sale are limited to representations and warranties related to authority, ownership and the ability to convey title to such Shareholder's shares, including, without limitation, representations and warranties that (A) the Shareholder holds all right, title and interest in and to the Shares such Shareholder purports to hold, free and clear of all liens and encumbrances, (B) the obligations of the Shareholder in connection with the transaction have been duly authorized, if applicable, (C) the documents to be entered into by the Shareholder have been duly executed by the Shareholder and delivered to the acquirer and are enforceable against the Shareholder in accordance with their respective terms and (D) neither the execution and delivery of documents to be entered into in connection with the transaction, nor the performance of the Shareholder's obligations thereunder, will cause a breach or violation of the terms of any agreement, law or judgment, order or decree of any court or governmental agency by which such Shareholder is subject or bound;

(ii) the Shareholder shall not be liable for the inaccuracy of any representation or warranty made by any other person in connection with the Proposed Sale, other than the Company (except to the extent that funds may be paid out of an escrow established to cover breach of representations, warranties and covenants of the Company as well as breach by any Shareholder of any identical representations, warranties and covenants provided by all Shareholders);

(iii) the liability for indemnification, if any, of such Shareholder in the Proposed Sale and for the inaccuracy of any representations and warranties made by the Company in connection with such Proposed Sale, is several and not joint with any other person (except to the extent that funds may be paid out of an escrow established to cover breach of representations, warranties and covenants of the Company as well as breach by any Shareholder of any identical representations, warranties and covenants provided by all Shareholders), and is pro rata in proportion to the amount of consideration paid to such Shareholder in connection with such Proposed Sale (in accordance with the provisions of the Certificate of Incorporation);

(iv) liability shall be limited to such Shareholder's applicable share of a negotiated aggregate indemnification amount that applies equally to all Shareholder but that in no event exceeds the amount of consideration otherwise payable to such Shareholder in connection with such Proposed Sale, except with respect to claims related to fraud by such Shareholder, the liability for which need not be limited as to such Shareholder;

(v) upon the consummation of the Proposed Sale, each holder of Common Stock will receive the same amount of consideration per share of Common Stock as is received by other holders in respect of their shares of Common Stock; and

(vi) subject to subsection 3.1(b)(e) above, requiring the same form of consideration to be available to the holders of any single class or series of capital stock, if any holders of a series or class of capital stock of the Company are given an option as to the form and amount of consideration to be received as a result of the Proposed Sale, all holders of such series or class of capital stock will be given the same option.

ARTICLE 4 LEGEND

4.1 **Legend.** Each certificate representing shares of Common Stock or Other Stock now or hereafter owned by a Shareholder or any Permitted Transferee shall be endorsed with the following legend:

“THE SALE OR TRANSFER OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE IS SUBJECT TO THE TERMS AND CONDITIONS OF A CERTAIN RIGHT OF FIRST REFUSAL AND SHAREHOLDERS AGREEMENT BY AND BETWEEN THE SHAREHOLDER, THE CORPORATION AND CERTAIN HOLDERS OF COMMON SHARES OF THE CORPORATION. COPIES OF SUCH AGREEMENT MAY BE OBTAINED UPON WRITTEN REQUEST TO THE SECRETARY OF THE CORPORATION.”

4.2 **Legend Removal.** The Section 4.1 legend shall be removed upon termination of this Agreement in accordance with the provisions of Section 5.1.

**ARTICLE 5
MISCELLANEOUS PROVISIONS**

- 5.1 **Termination.** This Agreement and the rights provided hereunder shall terminate upon the occurrence of any one of the following events:
- (a) the liquidation, dissolution or winding up of the business operations of the Company;
 - (b) the closing date of any firmly underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, at an aggregated public offering price of at least \$25,000,000 in gross proceeds and a per share price of at least \$5.00;
 - (c) the first date on which shares of Common Stock or Other Stock are listed on the New York Stock Exchange, the NYSE Amex, or the Nasdaq Stock Market or are traded on the OTC Bulletin Board electronic trading system and are registered under Section 12 of the Securities Exchange Act of 1934, as amended;
 - (d) a merger or consolidation of the Company with or into another corporation or other business entity upon the consummation of which the Company is not the surviving corporation and the shareholders of the Company immediately before the merger or consolidation do not own at least a majority of the voting securities of the surviving corporation or other business entity; or
 - (e) a distribution of some or all the Common Stock or Other Stock owned by BioTime, Inc. pro rata to its shareholders.

5.2 **Additional Shareholders.** Upon the sale of additional shares of Common Stock or Other Stock to additional investors, optionees or others, the Company, without prior action on the part of any such additional purchaser, shall permit each such additional purchaser to execute and deliver a counterpart of this Agreement and shall use its reasonable best efforts to ensure that each person who or entity which would own more than 1% of the Common Stock or Other Stock outstanding (as adjusted for stock splits and the like) shall be joined as a party to this Agreement. Each such additional party, upon execution and delivery of a counterpart of this Agreement shall be deemed a Shareholder.

5.3 **Violations or Remedies.** The parties agree that any violation of this Agreement (other than a default in payment of money) cannot be compensated for by damages, and any aggrieved party shall have the right, and is hereby granted the privilege, of obtaining specific performance of this Agreement in any court of competent jurisdiction in the event of any breach hereunder.

5.4 **Notices.** Any notice required or permitted to be given to a party pursuant to the provisions of this Agreement shall be in writing and shall be effective upon personal delivery or upon deposit in the United States mail, postage prepaid, or sent by next business day air delivery service, properly addressed to the party to be notified as set forth below such party's signature or at such other address as such party may designate by ten (10) days advance written notice to the other parties hereto.

5.5 **Parties; Successors and Assigns.** Except as otherwise provided herein, this Agreement and the rights and obligations of the parties hereunder shall inure to the benefit of, and be binding upon, the parties and their respective successors, assigns (including transferees of any shares of any Common Stock and Other Stock) and legal representatives. Any transferee of shares of Common Stock or Other Stock, or any other person or entity to whom the Company may issue or sell Common Stock or Other Stock, may become a Shareholder under this Agreement by executing and delivering to the Company a counterpart of this Agreement or an undertaking, in form and substance approved by the Company, to be bound by this Agreement as a party. The participation rights of the Shareholders hereunder are only assignable (i) by each Shareholder to any Permitted Transferee, or (ii) to an assignee or transferee who acquires any of such Shareholder's shares of Common Stock or Other Stock.

5.6 **Severability.** In the event one or more of the provisions of this Agreement should, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Agreement, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

5.7 **Amendments.** Any amendment or modification of this Agreement shall be effective only if evidenced by a written instrument executed by (i) the Company, and (ii) Shareholders holding a majority of the Common Stock held by the Shareholders; provided, however, that any Shareholder may waive any of its rights hereunder without obtaining the consent of any other Shareholder or the Company; and provided further, that if any Shareholder, alone or together with its Affiliates, owns a majority of the Common Stock held by the Shareholders (a "Controlling Shareholder"), then any amendment of this Agreement shall require the approval of the Controlling Shareholder and its Affiliates and a majority of the Common Stock held by Shareholders other than the Controlling Shareholder and its Affiliates. Any waiver by a party of its rights hereunder shall be effective only if evidenced by a written instrument. In no event shall such waiver of any rights hereunder constitute the waiver of such rights in any future instance unless the waiver so specifies in writing. Any amendment or waiver effected in accordance with this Section shall be binding upon the Company, each Shareholder, and each Permitted Transferee.

5.8 **Governing Law; Venue.** This Agreement is to be construed in accordance with and governed by the internal laws of the State of California without giving effect to any choice of law rule that would cause the application of the laws of any jurisdiction other than the internal laws of the State of California to the rights and duties of the parties.

5.9 **Entire Agreement.** This Agreement and the documents referred to herein constitute the entire agreement among the parties with respect to the subject matter hereof and no party shall be liable or bound to any other party in any manner by any warranties, representations or covenants except as specifically set forth herein or therein.

5.10 **Counterparts.** This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument. This Agreement may be executed with signatures transmitted among the parties by facsimile, and no party shall deny the validity of a signature or this Agreement signed and transmitted by facsimile on the basis that a signed document is represented by a copy or facsimile and not an original.

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

Shareholders:

BioTime, Inc.

By: _____

Title: _____

Address: 1301 Harbor Bay Parkway, Suite 100
Alameda, California 94502

Yeda Research and Development Co., Ltd.

By: _____

Title: _____

Address: Herzl Street 2
Rehovot, Israel 76100

David Warshawsky

Address: Paamoni 2
Tel Aviv 62918
Israel

Yaron Guan-Golan

Address: Flat 8C, Tower 3, The Hermitage
1 Hoi Wang Road, Kowloon
Hong Kong

Kenneth Elsner

Address: 9 Kennie Lane
Pembroke, MA 02359

Company:

LifeMap Sciences, Inc.

By: _____

Title: _____

Address: 1301 Harbor Bay Parkway, Suite 100
Alameda, California 94502

**SCHEDULE A
LIST OF SHAREHOLDERS**

BioTime, Inc.

David Warshawsky
Paamoni 2
Tel Aviv 62918
Israel

Yaron Guan-Golan
Flat 8C, Tower 3, The Hermitage
1 Hoi Wang Road, Kowloon
Hong Kong

Kenneth Elsner
9 Kennie Lane
Pembroke, MA 02359

Yeda Research and Development Company, Ltd.
Herzl Street 2
Rehovot, Israel 76100

EXHIBIT J

Opinion of BioTime Counsel

LAW OFFICES
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May ___, 2012

Xennex, Inc.
1020 Plain Street, Suite 290
Marshfield, MA 02050

RE: Agreement and Plan of Merger

Gentlemen:

We have acted as counsel to BioTime, Inc. ("BioTime") and LifeMap Sciences, Inc. ("LifeMap") in connection with that certain Agreement and Plan of Merger ("Merger Agreement"), dated April 19, 2012, by and among BioTime, LifeMap, Xennex, Inc. ("Xennex") and the stockholders of Xennex ("Stockholders"). We are providing this opinion at the request of BioTime and LifeMap pursuant to Section 4.2(f) of the Merger Agreement.

In our capacity as counsel to BioTime and LifeMap, we have examined originals or copies of originals of the following documents:

- A. Articles of Incorporation of BioTime, as amended, as filed with the Secretary of State of California;
 - B. Bylaws, as amended, of BioTime;
 - C. Certificate of the Secretary of State of California as to the good standing of BioTime;
 - D. Articles of Incorporation of LifeMap, as amended, as filed with the Secretary of State of California;
 - E. Bylaws, as amended, of LifeMap;
 - F. Certificate of the Secretary of State of California as to the good standing of LifeMap;
 - G. The Merger Agreement and the schedules and exhibits thereto; and
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H. Minutes of the proceedings of the boards of directors, or written consents of the directors, of BioTime and LifeMap.

In preparing this opinion:

- (i) We have assumed the due authorization, execution and delivery of the Merger Agreement by Xennex and the Stockholders;
 - (ii) We have assumed the legal competency of all individual signers of documents.
 - (iii) We have assumed that all signatures of parties are genuine.
 - (iv) In those cases where we have examined copies of documents, we have assumed that those copies are complete and accurate and conform to the originals, and that the originals are genuine.
 - (v) We have assumed that there are no oral or written modifications of or amendments or supplements to the Merger Agreement and that there has been no waiver of any of the provisions of the Merger Agreement by action of the parties or otherwise.
 - (vi) We have relied on a Certificates of Good Standing from the Secretary of State of California with respect to the organization and existence of BioTime and LifeMap.
 - (vii) We have relied on (a) a certificate of the Secretary of BioTime as to certain matters, including copies of the Articles of Incorporation and Bylaws of BioTime that we reviewed, and resolutions adopted by the board of directors of BioTime with respect to the Merger Agreement; and (b) a certificate of officers of BioTime as to the incumbency of the officers who signed the Merger Agreement on behalf of BioTime;
 - (viii) We have relied on (a) a certificate of the Secretary of LifeMap as to certain matters, including copies of the Articles of Incorporation and Bylaws of LifeMap that we reviewed, and resolutions adopted by the board of directors of LifeMap with respect to the Merger Agreement; and (b) a certificate of officers of LifeMap as to the incumbency of the officers who signed the Merger Agreement on behalf of LifeMap;
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(ix) We have assumed that the Merger Agreement has been validly approved by the stockholders of Xennex, and that the Merger Agreement is the valid and binding agreement of Xennex and the Stockholders, and is enforceable against them in accordance with its terms; and

(x) We have reviewed and relied such other documents, matters, statutes, ordinances, published rules and regulations, published judicial and governmental decisions interpreting or applying the same, and other official interpretations as we deem applicable in connection with this opinion.

In reaching our opinions, we have made the inquiry of the officers of BioTime and LifeMap reflected in the Manager's Certificate, but we have undertaken no other investigation or verification of such matters. In basing certain of our opinions on "our knowledge," the words "our knowledge" signify that, in the course of our representation of BioTime and LifeMap no facts have come to our attention that would give us actual knowledge or actual notice that any such opinions or other matters are not accurate. Further, the words "our knowledge" as used in this opinion are intended to be limited to the actual knowledge of the attorneys within our firm who have been directly involved in representing BioTime and LifeMap in connection with the Merger Agreement.

Based on the foregoing and subject to the assumptions and qualifications set forth in this letter, it is our opinion that:

1. Each of BioTime and LifeMap is a corporation duly organized, validly existing and in good standing under the laws of California.
 2. The execution and delivery of the Merger Agreement, and the performance by BioTime and LifeMap of their respective obligations under this Agreement, have been duly authorized by all necessary action on the part of the Boards of Directors of BioTime and LifeMap. The Merger Agreement is the valid and binding agreement of BioTime or LifeMap, enforceable in accordance with its terms.
 3. The execution and delivery of the Merger Agreement by BioTime and LifeMap do not violate any provisions of (i) any federal or state rule, regulation, statute, or law applicable to BioTime or LifeMap, (ii) the terms of any order, writ, or decree of any federal or state court or judicial or regulatory authority or body by which BioTime or LifeMap is bound and about which we have actual knowledge, or (iii) the Articles of Incorporation or Bylaws of BioTime or LifeMap.
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4. The BioTime common shares, no par value, and the shares of LifeMap common stock, no par value, into which shares of Xennex capital stock will be converted upon consummation of the Merger, when issued in accordance with the Merger Agreement, will be duly authorized and validly issued, fully paid, and nonassessable.

5. To our knowledge, there is no action, proceeding, or investigation pending which challenges BioTime's or Life Map's right to enter into the Merger Agreement, or challenges any action taken or to be taken, by BioTime or LifeMap in connection with the Merger Agreement.

Our opinion as to the enforceability of the Merger Agreement is qualified in all respects by:

- (a) limitations imposed by bankruptcy, insolvency, reorganization, arrangement, moratorium and other laws relating to or affecting the rights of creditors generally;
- (b) limitations on rights to indemnification and contribution which may be imposed by applicable law, including the Securities Act of 1933, as amended, and applicable state securities laws, or equitable principles; and
- (c) general principles of equity, regardless of whether such enforceability is considered in a proceeding at law or in equity.

We express no opinion as to the laws of any jurisdiction other than the laws of the State of California and the laws of the United States of America. The opinions expressed above concern only the effect of the laws (excluding the principles of conflict of laws) of the State of California and the United States of America as currently in effect. We assume no obligation to supplement this opinion if any applicable laws change after the date of this opinion, or if we become aware of any facts that might change the opinions expressed above after the date of this opinion.

The foregoing opinions are for the exclusive reliance of Xennex and the Stockholders.

Very truly yours,

Thompson, Welch, Soroko & Gilbert LLP

EXHIBIT K

Employment Agreements / Offer Letters

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT ("Agreement") is made as of _____, 201__ by and between LifeMap Sciences, Inc. ("LifeMap"), a California corporation, and _____ ("Executive").

1. Engagement; Position and Duties.

(a) LifeMap agrees to employ Executive in the position described on Exhibit A (which Exhibit A is a part of this Agreement) effective as of the date of this Agreement. Executive shall perform the duties and functions described on Exhibit A and such other duties as the executive(s) to whom Executive reports or the Board of Directors of LifeMap may from time to time determine. Executive shall devote Executive's best efforts, skills, and abilities, on a full-time basis, exclusively to the business of LifeMap and its Related Companies pursuant to, and in accordance with, business policies and procedures, as fixed from time to time by the Board of Directors (the "Policies"). Executive covenants and agrees that Executive will faithfully adhere to and fulfill the Policies, including any changes to the Policies that may be made in the future. Executive may be provided with a copy of LifeMap's employee manual (the "Manual") which contains the Policies. LifeMap may change its Policies from time to time, in which case Executive will be notified of the changes in writing by a memorandum, a letter, or an update or revision of the Manual.

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

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

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

2. Compensation

(a) **Salary.** During the term of this Agreement, LifeMap shall pay to the Executive the salary shown on Exhibit A. Executive's salary shall be paid in equal semi-monthly installments, consistent with LifeMap's regular salary payment practices. Executive's salary may be increased from time-to-time by LifeMap, in LifeMap's sole and absolute discretion, without affecting this Agreement.

(b) **Bonus.** Executive may be eligible for an annual bonus, as may be approved by the Board of Directors in its discretion, based on Executive's performance and achievement of goals or milestones set by the Board of Directors from time to time. Executive agrees that the Board of Directors of LifeMap may follow the recommendations of the Compensation Committee of the board of directors of LifeMap's parent company in determining whether to award a bonus or to establish performance goals or milestones. Executive also agrees that the Board of Directors and LifeMap are not obligated to adopt any bonus plan, to maintain in effect any bonus plan that may now be in effect or that may be adopted during the term of Executive's employment, or to pay Executive a bonus unless a bonus is earned under the terms and conditions of any bonus plan adopted by LifeMap.

(c) **Expense Reimbursements.** LifeMap or a Related Company shall reimburse Executive for reasonable travel and other business expenses (but not expenses of commuting to work), as well as expenses spent at the request of LifeMap or its Related Company incurred by Executive in the performance of Executive's duties under this Agreement, subject to the Policies and procedures in effect from time to time, and provided that Executive submits supporting vouchers.

(d) **Benefit Plans.** Executive shall be entitled to participate (to the extent Executive qualifies) in certain retirement, pension, life, health, accident and disability insurance, stock option plan or other similar employee benefit plans which may be adopted by LifeMap (or a Related Company) for its employees. LifeMap and the Related Companies have the right, at any time and without any amendment of this Agreement, to adopt, amend, change, or terminate any such benefit plans that may now be in effect or that may be adopted in the future. Any benefits to which Executive may be entitled under any benefit plan shall be governed by the terms and conditions of the applicable benefit plan, and any related plan documents, as in effect from time to time. In addition, LifeMap shall provide the Executive with employee benefit plans that are mandatory or required by local laws and regulation where the Executive resides. If Executive receives any grant of stock options or restricted stock under any stock option plan or stock purchase plan of LifeMap or any Related Company, the terms and conditions of the stock options or restricted stock, and Executive's rights with respect to the stock options or restricted stock, shall be governed by (i) the terms of the applicable stock option or stock purchase plan, as the same may be amended from time to time, and (ii) the terms and conditions of any stock option agreement or stock purchase agreement and related agreements that Executive may sign or be required to sign with respect to the stock options or restricted stock.

(e) **Vacation; Sick Leave.** Executive shall be entitled to the number of days of vacation and sick leave (without reduction in compensation) during each calendar year shown on Exhibit A or as may be provided by the Policies. Executive's vacation shall be taken at such time as is consistent with the needs and Policies of LifeMap and its Related Companies. All vacation days and sick leave days shall accrue annually based upon days of service. Executive's right to leave from work due to illness is subject to the Policies and the provisions of this Agreement governing termination due to disability, sickness or illness. The Policies governing the disposition of unused vacation days and sick leave days remaining at the end of LifeMap's fiscal year shall govern whether unused vacation days or sick leave days will be paid, lost, or carried over into subsequent fiscal years.

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

4. **Inventions/Intellectual Property/Confidential Information**

(a) As used in this Agreement, "Intellectual Property" means any and all inventions, discoveries, formulas, improvements, writings, designs, or other intellectual property. Any and all Intellectual Property relating to or in any way pertaining to or connected with the systems, products, apparatus, or methods employed, manufactured, constructed, or researched by LifeMap, or any Related Company, which Executive may conceive or make while performing services for LifeMap or a Related Company shall be the sole and exclusive property of LifeMap or the applicable Related Company. Executive hereby irrevocably assigns and transfers to LifeMap, or a Related Company, all rights, title and interest in and to all Intellectual Property that Executive may now or in the future have under patent, copyright, trade secret, trademark or other law, in perpetuity or for the longest period otherwise permitted by law, without the necessity of further consideration. LifeMap and the Related Companies will be entitled to obtain and hold in their own name all copyrights, patents, trade secrets, trademarks and other similar registrations with respect to such Intellectual Property.

(b) **Moral Rights.** To the extent allowed by law, the rights to Intellectual Property assigned by Executive to LifeMap or any Related Company includes all rights of paternity, integrity, disclosure and withdrawal, and any other rights that may be known as or referred to as "moral rights," "artist's rights," "droit moral," or the like (collectively "Moral Rights"). To the extent Executive retains any such Moral Rights under applicable law, Executive hereby ratifies and consents to any action that may be taken with respect to such Moral Rights by or authorized by LifeMap or a Related Company and agrees not to assert any Moral Rights with respect thereto. Executive shall confirm in writing any such ratifications, consents, and agreements from time to time as requested by LifeMap or Related Company.

(c) **Execution of Documents; Power of Attorney.** Executive agrees to execute and sign any and all applications, assignments, or other instruments which LifeMap or a Related Company may deem necessary in order to enable LifeMap or a Related Company, at its expense, to apply for, prosecute, and obtain patents of the United States or foreign countries for the Intellectual Property, or in order to assign or convey to, perfect, maintain or vest in LifeMap or a Related Company the sole and exclusive right, title, and interest in and to the Intellectual Property. If LifeMap or a Related Company is unable after reasonable efforts to secure Executive's signature, cooperation or assistance in accordance with the preceding sentence, whether because of Executive's incapacity or any other reason whatsoever, Executive hereby designates and appoints LifeMap or any Related Company or its designee as Executive's agent and attorney-in-fact, to act on Executive's behalf, to execute and file documents and to do all other lawfully permitted acts necessary or desirable to perfect, maintain or otherwise protect LifeMap's or a Related Company's rights in the Intellectual Property. Executive acknowledges and agrees that such appointment is coupled with an interest and is irrevocable.

(d) **Disclosure of Intellectual Property.** Executive agrees to disclose promptly to LifeMap or a Related Company all Intellectual Property which Executive may create or conceive solely, jointly, or commonly with others. This paragraph is applicable whether or not the Intellectual Property was made under the circumstances described in paragraph (a) of this Section. Executive agrees to make such disclosures understanding that they will be received in confidence and that, among other things, they are for the purpose of determining whether or not rights to the related Intellectual Property is the property of LifeMap or a Related Company.

(e) **Limitations.** The obligations provided for by this Section 4, except for the requirements as to disclosure in paragraph 4(d), do not apply to any rights Executive may have acquired in connection with Intellectual Property for which no equipment, supplies, facility, or trade secret information of LifeMap or a Related Company was used and which was developed entirely on the Executive's own time and (i) which at the time of conception or reduction to practice does not relate directly or indirectly to the business of LifeMap or a Related Company, or to the actual or demonstrable anticipated research or development activities or plans of LifeMap or a Related Company, or (ii) which does not result from any work performed by Executive for LifeMap or a Related Company. All Intellectual Property that (1) results from the use of equipment, supplies, facilities, or trade secret information of LifeMap or a Related Company; (2) relates, at the time of conception or reduction to practice of the invention, to the business of LifeMap or a Related Company, or actual or demonstrably anticipated research or development of LifeMap or a Related Company; or (3) results from any work performed by Executive for LifeMap or a Related Company shall be assigned and is hereby assigned to LifeMap or the applicable Related Company. The parties understand and agree that this limitation is intended to be consistent with California Labor Code, Section 2870, a copy of which is attached as Exhibit A. If Executive wishes to clarify that something created by Executive prior to Executive's employment by LifeMap or a Related Company that relates to the actual or proposed business of LifeMap or a Related Company is not within the scope of this Agreement, Executive has listed it on Exhibit B in a manner that does not violate any third party rights.

(f) **Confidential and Proprietary Information.** During Executive's employment, Executive will have access to trade secrets and confidential information of LifeMap and one or more Related Companies. Confidential Information means all information and ideas, in any form, relating in any manner to matters such as: products; formulas; technology and know-how; inventions; clinical trial plans and data; business plans; marketing plans; the identity, expertise, and compensation of employees and contractors; systems, procedures, and manuals; customers; suppliers; joint venture partners; research collaborators; licensees; and financial information related to LifeMap or a Related Company's business. Confidential Information also shall include any information of any kind, whether belonging to LifeMap, a Related Company, or any third party, that LifeMap or a Related Company has agreed to keep secret or confidential under the terms of any agreement with any third party. Confidential Information does not include: (i) information that is or becomes publicly known through lawful means other than unauthorized disclosure by Executive; (ii) information that was rightfully in Executive's possession prior to Executive's employment with LifeMap and was not assigned to LifeMap or a Related Company or was not disclosed to Executive in Executive's capacity as a director or other fiduciary of LifeMap or a Related Company; or (iii) information disclosed to Executive, after the termination of Executive's employment by LifeMap, without a confidential restriction by a third party who rightfully possesses the information and did not obtain it, either directly or indirectly, from LifeMap or a Related Company, and who is not subject to an obligation to keep such information confidential for the benefit of LifeMap, a Related Company, or any third party with whom LifeMap or a Related Company has a contractual relationship. Executive understands and agrees that all Confidential Information shall be kept confidential by Executive both during and after Executive's employment by LifeMap or any Related Company. Executive further agrees that Executive will not, without the prior written approval by LifeMap or a Related Company, disclose any Confidential Information, or use any Confidential Information in any way, either during the term of Executive's employment or at any time thereafter, except as required by LifeMap or a Related Company in the course of Executive's employment.

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

(a) Payments Due Upon Termination of Employment. Upon termination of Executive's employment with LifeMap and all Related Companies at any time and for any reason, Executive will be entitled to receive only the severance benefits set forth below, but Executive will not be entitled to any other compensation, award, or damages with respect to Executive's employment or termination of employment.

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

(ii) Termination Without Cause. In the event of Executive's termination by LifeMap without Cause after 12 months of employment, Executive will be entitled to (A) the benefits set forth in paragraph (a)(i) of this Section, and (B) payment in an amount equal to six months' base salary which may be paid in a lump sum or, at the election of LifeMap, in installments consistent with the payment of Executive's salary while employed by LifeMap, subject to such payroll deductions and withholdings as are required by law, and (C) payment, for a period of six months, of any health insurance benefits that Executive was receiving at the time of termination of Executive's employment, under a BioTime employee health insurance plan subject to the Consolidated Omnibus Budget Reconciliation Act ("COBRA") and (D) fifty percent (50%) accelerated vesting of Employee Stock Options. This paragraph shall not apply to (x) termination of Executive's employment by a Related Company if Executive remains employed by LifeMap, or (y) termination of Executive's employment by LifeMap if Executive remains employed by a Related Company. The resignation of Executive following a material reduction in compensation or duties shall be deemed Termination Without Cause.

(iii) Change of Control. In the event LifeMap (or any successor in interest to LifeMap that has assumed LifeMap's obligation under this Agreement) terminates Executive's employment without Cause within twelve (12) months following a Change in Control, Executive will be entitled to (A) the benefits set forth in paragraph (a)(i) of this Section, and (B) payment of an amount equal to twelve months' base salary, which shall be paid in a lump sum, subject to such payroll deductions and withholdings as are required by law, and (C) payment, for a period of twelve months, of any health insurance benefits that Executive was receiving at the time of termination of Executive's employment under a BioTime employee health insurance plan subject to COBRA. This paragraph shall not apply to (x) termination of Executive's employment by a Related Company if Executive remains employed by LifeMap or a successor in interest, or (y) termination of Executive's employment by LifeMap or a successor in interest if Executive remains employed by a Related Company.

(b) Release. Any other provision of this Agreement notwithstanding, paragraphs (a)(ii) and (a)(iii) of this Section shall not apply unless the Executive (i) has executed a general release of all claims against BioTime or its successor in interest and the Related Companies (in a form prescribed by BioTime or its successor in interest) and (ii) has returned all property in the Executive's possession belonging LifeMap or its successor in interest and any Related Companies.

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

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

(ii) "Cause" means: (A) the failure to properly perform Executive's job responsibilities, as determined reasonably and in good faith by the Board of Directors; (B) commission of any act of fraud, gross misconduct or dishonesty with respect to LifeMap or any Related Company; (C) conviction of, or plea of guilty or "no contest" to, any felony, or a crime involving moral turpitude; (D) breach of any provision of this Agreement or any provision of any proprietary information and inventions agreement with LifeMap or any Related Company; (E) failure to follow the lawful directions of the Board of Directors of LifeMap or any Related Company; (F) chronic alcohol or drug abuse; (G) obtaining, in connection with any transaction in which LifeMap, any Related Company, or any of LifeMap's affiliates is a party, a material undisclosed financial benefit for Executive or for any member of Executive's immediate family or for any corporation, partnership, limited liability company, or trust in which Executive or any member of Executive's immediate family owns a material financial interest; or (H) harassing or discriminating against, or participating or assisting in the harassment of or discrimination against, any employee of LifeMap (or a Related Company or an affiliate of LifeMap) based upon gender, race, religion, ethnicity, or nationality.

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

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

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

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

6. Turnover of Property and Documents on Termination. Executive agrees that on or before termination of Executive's employment, Executive will return to LifeMap and all Related Companies all equipment and other property belonging to LifeMap and the Related Companies, and return or destroy all originals and copies of Confidential Information (in any and all media and formats, and including any document or other item containing Confidential Information) in Executive's possession or control, and all of the following (in any and all media and formats, and whether or not constituting or containing Confidential Information) in Executive's possession or control: (a) lists and sources of customers; (b) proposals or drafts of proposals for any research grant, research or development project or program, marketing plan, licensing arrangement, or other arrangement with any third party; (c) reports, job or laboratory notes, specifications, and drawings pertaining to the research, development, products, patents, and technology of LifeMap and any Related Companies; (d) any and all Intellectual Property developed by Executive during the course of employment; and (e) the Manual and memoranda related to the Policies. Executive will not be required to destroy electronic versions of the Confidential Information to the extent that such destruction is not reasonably practical.

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

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

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

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

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

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

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

13. Survival. This Section 13 and the covenants and agreements contained in Sections 4 and 6 of this Agreement shall survive termination of this Agreement and Executive's employment.

14. Notices. Any notices or other communication required or permitted to be given under this Agreement shall be in writing and shall be mailed by certified mail, return receipt requested, or sent by next business day air courier service, or personally delivered to the party to whom it is to be given at the address of such party set forth on the signature page of this Agreement (or to such other address as the party shall have furnished in writing in accordance with the provisions of this Section 14).

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

EXECUTIVE:

(Signature)

(Please Print Name)

Address: _____

LIFEMAP:

LifeMap Sciences, Inc.

By: _____

Title: _____

Address: 1301 Harbor Bay Parkway, Suite 100
Alameda, California 94502

EXHIBIT A

Job Title: _____

Description of Job and Duties:

Annual Salary (if applicable): _____

Hourly Wage (if applicable): _____

Vacation Days:

Personal Time Off:

Application of provision providing that employee shall assign or offer to assign rights in invention to employer.

(a) Any provision in an employment agreement which provides that an employee shall assign, or offer to assign, any of his or her rights in an invention to his or her employer shall not apply to an invention that the employee developed entirely on his or her own time without using the employer's equipment, supplies, facilities, or trade secret information except for those inventions that either:

(i) Relate at the time of conception or reduction to practice of the invention to the employer's business, or actual or demonstrably anticipated research or development of the employer; or

(ii) Result from any work performed by the employee for his employer.

(b) To the extent a provision in an employment agreement purports to require an employee to assign an invention otherwise excluded from being required to be assigned under subdivision (a), the provision is against the public policy of this state and is unenforceable.

EXHIBIT C
PRIOR MATTERS

I, Michael D. West, certify that:

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

Date: May 9, 2012

/s/ Michael D. West

Michael D. West
Chief Executive Officer

CERTIFICATIONS

Exhibit 31

I, Peter S. Garcia, certify that:

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

Date: May 9, 2012

/s/ Peter S. Garcia

Peter S. Garcia

Chief Financial Officer

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

In connection with the Quarterly Report on Form 10-Q of BioTime, Inc. (the "Company") for the quarter ended March 31, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Michael D. West, Chief Executive Officer, and Robert W. Peabody, Chief Financial Officer of the Company, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 9, 2012

/s/ Michael D. West

Michael D. West
Chief Executive Officer

/s/ Peter S. Garcia

Peter S. Garcia
Chief Financial Officer
