

**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 June 30, 2013

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 o No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). x Yes o No

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
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). o 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: 57,938,220 common shares, no par value, as of August 7, 2013.

## 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.*

*References to "we" means BioTime, Inc. and its subsidiaries unless the context otherwise indicates.*

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

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

	<u>June 30, 2013</u> (unaudited)	<u>December 31,</u> 2012
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	\$ 14,306,296	\$ 4,349,967
Inventory	64,745	55,316
Prepaid expenses and other current assets	3,760,667	2,774,196
Total current assets	<u>18,131,708</u>	<u>7,179,479</u>
Equipment, net	1,841,253	1,348,554
Deferred license and consulting fees	600,583	669,326
Deposits	118,576	64,442
Intangible assets, net	19,201,647	20,486,792
TOTAL ASSETS	<u>\$ 39,893,767</u>	<u>\$ 29,748,593</u>
<b>LIABILITIES AND EQUITY</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable and accrued liabilities	\$ 3,972,224	\$ 3,989,962
Deferred license and subscription revenue, current portion	462,773	400,870
Total current liabilities	<u>4,434,997</u>	<u>4,390,832</u>
<b>LONG-TERM LIABILITIES</b>		
Deferred license revenue, net of current portion	693,242	768,678
Deferred rent, net of current portion	47,134	57,214
Other long-term liabilities	201,093	237,496
Total long-term liabilities	<u>941,469</u>	<u>1,063,388</u>
Commitments and contingencies		
<b>EQUITY</b>		
Preferred Shares, no par value, authorized 2,000,000 and 1,000,000 shares respectively, as of June 30, 2013 and December 31, 2012; none issued		
Common shares, no par value, authorized 125,000,000 and 75,000,000 shares respectively, as of June 30, 2013 and December 31, 2012; 57,932,220 issued and 55,616,934 outstanding at June 30, 2013 and 51,183,318 issued and 49,383,209 outstanding as of December 31, 2012	148,002,896	119,821,243
Contributed capital	93,972	93,972
Accumulated other comprehensive income/(loss)	117,724	(59,570)
Accumulated deficit	(117,178,103)	(101,895,712)
Treasury stock at cost: 2,315,286 and 1,800,109 shares at June 30, 2013 and at December 31, 2012, respectively	(10,120,653)	(8,375,397)
Total shareholders' equity	<u>20,915,836</u>	<u>9,584,536</u>
Noncontrolling interest	13,601,465	14,709,837
Total equity	<u>34,517,301</u>	<u>24,294,373</u>
TOTAL LIABILITIES AND EQUITY	<u>\$ 39,893,767</u>	<u>\$ 29,748,593</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		Six Months Ended	
	June 30, 2013	June 30, 2012	June 30, 2013	June 30, 2012
<b>REVENUES:</b>				
License fees	\$ 362,249	\$ 175,419	\$ 712,078	\$ 211,887
Royalties from product sales	103,315	126,455	210,914	273,857
Grant income	693,480	672,537	777,293	1,074,771
Sale of research products	57,281	59,253	124,005	127,037
Total revenues	<u>1,216,325</u>	<u>1,033,664</u>	<u>1,824,290</u>	<u>1,687,552</u>
Cost of sales	(180,811)	(83,918)	(363,560)	(105,497)
Total revenues, net	<u>1,035,514</u>	<u>949,746</u>	<u>1,460,730</u>	<u>1,582,055</u>
<b>EXPENSES:</b>				
Research and development	(5,530,395)	(4,615,436)	(10,975,825)	(8,773,302)
General and administrative	(3,621,570)	(2,413,641)	(7,005,091)	(4,802,337)
Total expenses	<u>(9,151,965)</u>	<u>(7,029,077)</u>	<u>(17,980,916)</u>	<u>(13,575,639)</u>
Loss from operations	<u>(8,116,451)</u>	<u>(6,079,331)</u>	<u>(16,520,186)</u>	<u>(11,993,584)</u>
<b>OTHER INCOME/(EXPENSES):</b>				
Interest income, net	579	3,355	1,522	11,636
Other income/(expense), net	(80,541)	85,260	(109,520)	(240,005)
Gain/(Loss) on sale/write off of equipment	800	(3,546)	(710)	(3,546)
Total other income/(expense), net	<u>(79,162)</u>	<u>85,069</u>	<u>(108,708)</u>	<u>(231,915)</u>
NET LOSS	(8,195,613)	(5,994,262)	(16,628,894)	(12,225,499)
Less: Net loss attributable to noncontrolling interest	645,848	537,040	1,346,503	1,796,378
<b>NET LOSS ATTRIBUTABLE TO BIOTIME, INC.</b>	<b>\$ (7,549,765)</b>	<b>\$ (5,457,222)</b>	<b>\$ (15,282,391)</b>	<b>\$ (10,429,121)</b>
Foreign currency translation gain (loss)	28,857	(182,947)	177,294	(58,859)
<b>TOTAL COMPREHENSIVE NET LOSS</b>	<b>\$ (7,520,908)</b>	<b>\$ (5,640,169)</b>	<b>\$ (15,105,097)</b>	<b>\$ (10,487,980)</b>
<b>BASIC AND DILUTED LOSS PER COMMON SHARE</b>	<b>\$ (0.14)</b>	<b>\$ (0.11)</b>	<b>\$ (0.29)</b>	<b>\$ (0.21)</b>
<b>WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING:</b>				
BASIC AND DILUTED	<u>53,791,434</u>	<u>50,548,582</u>	<u>52,490,767</u>	<u>50,435,272</u>

See accompanying notes to the condensed consolidated interim financial statements.

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

	Six Months Ended	
	June 30, 2013	June 30, 2012
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net loss attributable to BioTime, Inc.	\$ (15,282,391)	\$ (10,429,121)
Adjustments to reconcile net loss attributable to BioTime, Inc. to net cash used in operating activities:		
Depreciation expense	253,215	183,981
Amortization of intangible asset	1,285,145	1,123,431
Amortization of deferred license and royalty revenues	(75,914)	(75,796)
Amortization of deferred consulting fees	32,559	388,124
Amortization of deferred license fees	54,750	87,434
Amortization of deferred rent	(4,446)	(5,427)
Amortization of deferred grant income	–	(261,777)
Stock-based compensation	1,351,795	929,257
Reduction in receivables from the reversal of revenues	–	205,004
Write-off of security deposit	–	(3,570)
Loss on sale/write off of equipment	710	3,546
Net loss allocable to noncontrolling interest	(1,346,503)	(1,796,378)
Changes in operating assets and liabilities:		
Accounts receivable, net	(25,701)	(12,156)
Grant receivable	(269,365)	359,420
Inventory	(9,429)	(3,844)
Prepaid expenses and other current assets	(414,449)	7,195
Other long-term assets	(5,000)	–
Accounts payable and accrued liabilities	(30,865)	(373,555)
Deferred revenues	62,381	(13,015)
Other long-term liabilities	(41,731)	(13,462)
<b>Net cash used in operating activities</b>	<b>(14,465,239)</b>	<b>(9,674,679)</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Purchase of equipment	(735,124)	(153,490)
Cash acquired in connection with mergers	–	292,387
Proceeds for the sale of equipment	–	4,500
Security deposit paid	(54,423)	(526)
<b>Net cash provided by (used in) investing activities</b>	<b>(789,547)</b>	<b>142,871</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Proceeds from the exercise of stock options from employees	–	14,800
Proceeds from issuance of common shares	23,810,421	–
Financing fees paid upon issuance of common shares	(747,907)	–
Proceeds from sale of treasury shares	1,819,500	–
Proceeds from the sale of common shares of subsidiary	255,502	–
<b>Net cash provided by financing activities</b>	<b>25,137,516</b>	<b>14,800</b>
Effect of exchange rate changes on cash and cash equivalents	73,599	(35,046)
<b>NET CHANGE IN CASH AND CASH EQUIVALENTS:</b>	9,956,329	(9,552,054)
Cash and cash equivalents at beginning of period	4,349,967	22,211,897
Cash and cash equivalents at end of period	<b>\$ 14,306,296</b>	<b>\$ 12,659,843</b>
<b>SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:</b>		
Cash paid during the period for interest	\$ –	\$ 255
<b>SUPPLEMENTAL SCHEDULE OF NON-CASH FINANCING AND INVESTING ACTIVITIES:</b>		
Common shares issued as part of merger	\$ –	\$ 1,802,684
Common shares issued for consulting services	\$ 148,920	\$ –
Common shares issued for rent	\$ 242,726	\$ –

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'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 hES products for research use. 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 a variety of blood and lymphatic vascular disorders, as well as products for research using iPS and other cell reprogramming technology. 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 Sciences”) markets, sells and distributes *GeneCards*<sup>®</sup>, the leading human gene database, and is developing an integrated database suite to complement *GeneCards*<sup>®</sup> that will also include the *LifeMap*<sup>™</sup> database of embryonic development, stem cell research and regenerative medicine, and *MalaCards*, the human disease database. LifeMap Sciences will also market BioTime research products and *PanDaTox*, a database that can be used to identify genes and intergenic regions that are unclonable in *E. coli*, to aid in the discovery of new antibiotics and biotechnologically beneficial functional genes. LifeMap Sciences plans to commence research into the identification and development of novel cell lines for therapeutic products, including research on *PureStem*<sup>™</sup> human embryonic progenitor cells (“hEPC”) using the LifeMap Sciences proprietary discovery platform, with the goal of identifying those hEPC that have greatest potential for use in the development of cell-based therapies for degenerative diseases. Asterias Biotherapeutics, Inc. (“Asterias,” formerly known as BioTime Acquisition Corporation) was incorporated on September 24, 2012. Asterias was incorporated to explore opportunities to acquire assets and businesses in the field of stem cells and regenerative medicine.

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 has historically developed blood plasma volume expanders and related technology for use in surgery, emergency trauma treatment and other applications. BioTime's operating revenues are derived primarily from licensing fees and advertising from the marketing of the LifeMap Sciences database products, from royalties and licensing fees related to the sale of its plasma volume expander product, *Hextend*<sup>®</sup>, and from the sale of products for research.

The unaudited condensed consolidated interim balance sheet as of June 30, 2013, the unaudited condensed consolidated interim statements of operations and comprehensive loss for the three and six months ended June 30, 2013 and 2012, and the unaudited condensed consolidated interim statements of cash flows for the six months ended June 30, 2013 and 2012 have been prepared by BioTime's management in accordance with the instructions from 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 June 30, 2013 have been made. The condensed consolidated balance sheet as of December 31, 2012 is derived from BioTime's annual audited financial statements as of that date. The results of operations for the three and six months ended June 30, 2013 are not necessarily indicative of the operating results anticipated for the full year of 2013.

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, 2012, which was derived from audited financial statements. Certain previously furnished amounts have been reclassified to conform with presentations made during the current periods. These condensed consolidated interim financial statements should be read in conjunction with the annual audited consolidated financial statements and notes thereto included in BioTime's Form 10-K for the year ended December 31, 2012.

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

<b>Subsidiary</b>	<b>BioTime Ownership</b>	<b>Country</b>
ReCyte Therapeutics, Inc. (formerly Embryome Sciences, Inc.)	94.8%	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.	62.5%	Israel
LifeMap Sciences, Inc.	73.2%	USA
LifeMap Sciences, Ltd.	(1)	Israel
Asterias Biotherapeutics, Inc.	96.7%(2)	USA

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

(2) BioTime expects that its percentage ownership will be reduced to approximately 71.6% after Asterias issues common stock to BioTime and Geron Corporation pursuant to an Asset Contribution Agreement and sells common stock and warrants to a private investor for cash in a related transaction. See Note 9.

All material intercompany accounts and transactions have been eliminated in consolidation. As of June 30, 2013 and as of December 31, 2012, we consolidated the financial results of ReCyte Therapeutics, OncoCyte, BioTime Asia, OrthoCyte, LifeMap, ESI, Cell Cure Neurosciences, and Asterias as we have the ability to control their operating and financial decisions and policies through our ownership. 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 revenues consist of product royalty payments. License fee revenues consist of fees under license agreements and are recognized when earned and reasonably estimable and also include subscription and advertising revenue from our online databases based upon respective subscription and advertising periods. 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 approximately \$420,000 and \$395,000 and grants receivable amounted to approximately \$1,345,000 and \$1,062,000 as of June 30, 2013 and December 31, 2012, respectively. Some of these amounts are deemed uncollectible; as such BioTime recognized allowance for doubtful accounts in the amount of \$116,816 as of June 30, 2013 and December 31, 2012. 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 120 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 net 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/(loss) on the consolidated balance sheet. For the three and six months ended June 30, 2013, comprehensive net loss includes foreign currency translation gain of \$28,857 and \$177,294, respectively. Comprehensive net loss in the same periods in 2012 includes foreign currency translation loss of \$182,947 and \$58,859, 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 June 30, 2013 and December 31, 2012. BioTime files its income tax returns in the U.S. federal and various state and local and foreign jurisdictions. Generally, BioTime is no longer subject to income tax examinations by major taxing authorities for years before 2009. Any potential examinations may include questioning the timing and amount of deductions, the nexus of income among various tax jurisdictions and compliance with U.S. federal, state and local and foreign tax laws. Management does not expect that the total amount of unrecognized tax benefits will materially change over the next twelve months.

*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.

*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 5.

*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 and six months ended June 30, 2013 and 2012 excludes any effect from 4,394,634 options and 1,751,615 warrants, and 3,433,802 options and 636,613 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.

## 2. Inventory

BioTime held \$51,822 and \$41,494 of inventory of finished products on-site at its corporate headquarters in Alameda, California at June 30, 2013 and December 31, 2012, respectively. Finished goods products of \$12,923 and \$13,822 were held by a third party on consignment at June 30, 2013 and December 31, 2012, respectively.

## 3. Equipment

At June 30, 2013 and December 31, 2012, equipment, furniture and fixtures were comprised of the following:

	<b>June 30, 2013</b> <b>(unaudited)</b>	<b>December 31,</b> <b>2012</b>
Equipment, furniture and fixtures	\$ 2,851,456	\$ 2,098,812
Accumulated depreciation	(1,010,203)	(750,258)
Equipment, net	<u>\$ 1,841,253</u>	<u>\$ 1,348,554</u>

Depreciation expense amounted to \$253,215 and \$183,981 for the six months ended June 30, 2013 and 2012, respectively. The difference of \$6,730 between the depreciation expense recognized in the condensed consolidated statement of operations and the increase in accumulated depreciation of \$259,945 per the condensed consolidated balance sheet is primarily attributable to the impact of foreign currency conversion rates for the depreciation of assets held by foreign subsidiaries.

## 4. Intangible assets

At June 30, 2013 and December 31, 2012, intangible assets and intangible assets net of amortization were comprised of the following:

	<b>June 30, 2013</b> <b>(unaudited)</b>	<b>December 31,</b> <b>2012</b>
Intangible assets	\$ 25,702,909	\$ 25,702,909
Accumulated amortization	(6,501,262)	(5,216,117)
Intangible assets, net	<u>\$ 19,201,647</u>	<u>\$ 20,486,792</u>

BioTime amortizes its intangible assets over an estimated period of 10 years on a straight line basis. BioTime recognized \$1,285,145 and \$1,123,431 in amortization expense of intangible assets during the six months ended June 30, 2013 and 2012, respectively.

## 5. 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 June 30, 2013 and December 31, 2012.

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. ReCyte Therapeutics has assigned its rights under the License Agreement to BioTime. BioTime 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 June 30, 2013 and December 31, 2012.

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 June 30, 2013 and December 31, 2012.

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 June 30, 2013 and December 31, 2012.

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 June 30, 2013 and December 31, 2012.

As of June 30, 2013, future amortization of deferred license fees described above was as follows:

<b>Year Ended December 31,</b>	<b>Deferred License Fees</b>
2013	\$ 54,750
2014	109,500
2015	109,500
2016	109,500
2017	109,500
Thereafter	101,333
<b>Total</b>	<b>\$ 594,083</b>

## 6. Accounts Payable and Accrued Liabilities

At June 30, 2013 and December 31, 2012, accounts payable and accrued liabilities consisted of the following:

	<b>June 30, 2013 (unaudited)</b>	<b>December 31, 2012</b>
Accounts payable	\$ 1,687,529	\$ 1,168,077
Accrued bonuses	-	497,843
Other accrued liabilities	2,284,695	2,324,042
	<b>\$ 3,972,224</b>	<b>\$ 3,989,962</b>

## 7. Equity

### *Warrants*

BioTime has issued warrants to purchase its common shares as payments for services and in connection to certain business acquisitions. At June 30, 2013, 1,751,615 warrants to purchase common shares with a weighted average exercise price of \$6.59 and a weighted average remaining contractual life of 2.12 years were outstanding. At December 31, 2012, 556,613 warrants to purchase common shares with a weighted average exercise price of \$10.00 and a weighted average remaining contractual life of 1.32 years were outstanding.

### *Preferred Shares*

BioTime is authorized to issue 2,000,000 preferred shares. The shareholders approved the increase in the number of authorized preferred shares from 1,000,000 to 2,000,000 in May 2013. 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 June 30, 2013 BioTime has no issued and outstanding preferred shares.

### *Common Shares*

BioTime is authorized to issue 125,000,000 common shares with no par value. The shareholders approved the increase in the number of authorized common shares from 75,000,000 to 125,000,000 in May 2013. As of June 30, 2013, BioTime had issued 57,932,220 common shares and outstanding 55,616,934 common shares. The difference between the issued and outstanding number of common shares reflects the treasury stock treatment, for financial reporting purposes, of BioTime common shares held by its subsidiaries.

During the six months ended June 30, 2013, BioTime raised gross proceeds of \$11,571,953 from the sale of 2,594,156 BioTime common shares at a weighted average price of \$4.46 per share in the open market through our Controlled Equity Offering facility with Cantor Fitzgerald & Co. and through the sale of BioTime shares held by BioTime's majority owned subsidiaries, LifeMap Sciences and Cell Cure Neurosciences. The proceeds of the sale of BioTime shares by its subsidiaries belong to those subsidiaries.

In January 2013, BioTime and a private investor entered into a Stock and Warrant Purchase Agreement under which the investor agreed to invest \$5,000,000 in BioTime by purchasing, in two tranches, an aggregate of 1,350,000 BioTime common shares and warrants to purchase approximately 650,000 additional BioTime common shares. The first tranche of \$2,000,000 was funded on January 14, 2013, and BioTime issued to the investor 540,000 common shares and 259,999 warrants. BioTime received the second tranche of \$3,000,000 on April 10, 2013 at which time BioTime issued to the investor 810,000 common shares, and warrants to purchase an additional 389,999 common shares at an exercise price of \$5.00 per share.

In June 2013, BioTime sold 2,180,016 common shares and 545,004 warrants to purchase common shares for gross proceeds of \$9,057,967 under the Stock and Warrant Purchase Agreement entered between BioTime and certain investors. The common shares and warrants to purchase common shares were sold in "units" with each unit consisting of one common share and one-quarter of a warrant, at an offering price of \$4.155 per unit. The warrants have an initial exercise price of \$5.00 per share and are exercisable during the three year period beginning on the date of issuance, June 6, 2013.

During the six months ended June 30, 2013, no options or warrants were exercised.

During the six months ended June 30, 2013 and 2012, BioTime recognized stock-based compensation expenses of \$1,351,795 and \$929,257, respectively, due to stock options granted to employees and directors. During the six months ended June 30, 2013 and 2012, BioTime granted 1,155,000 and 130,000 options, respectively, under its 2012 Equity Incentive Plan and 2002 Stock Option Plan. Asterias granted 2,700,000 and nil options, respectively under its 2013 Equity Incentive Plan; OrthoCyte granted nil and 300,000 options, respectively under its 2010 Stock Option Plan; OncoCyte granted 80,000 and nil options, respectively under its 2011 Stock Option Plan; ReCyte granted nil and 550,000 options, respectively under its 2011 Stock Option Plan; LifeMap Sciences granted nil and 217,143 options, respectively under its 2011 Stock Option Plan; and BioTime Asia did not grant any options in either periods.

### *Option on LifeMap Sciences Common Stock Held by BioTime*

As a condition to the sale of BioTime shares and warrants under the terms of a Stock and Warrant Purchase Agreement during June 2013, BioTime entered into an Option Agreement with certain investors. Under the Option Agreement, each investor has an option to purchase a number of shares of common stock that BioTime holds in its subsidiary LifeMap Sciences, initially equal to the number of warrants that the investors purchased from BioTime. The options to purchase shares of LifeMap Sciences common stock may be exercised at a price of \$4.00 per share in lieu of exercising the warrants to purchase BioTime common shares. The exercise of an option by an investor will require the cancellation of one BioTime warrant for each share of LifeMap Sciences common stock (as adjusted to reflect any stock dividend, stock split, reverse stock split or other certain other transactions) purchased by the investor, so that an investor will have to choose between purchasing BioTime common shares and LifeMap Sciences common stock when they exercise either the warrants or the options. The right of a holder of an option to exercise its option is subject to the availability of an exemption from registration under the Securities Act of 1933, as amended.

## 8. Merger with XenneX, Inc.

On May 18, 2012, BioTime completed the acquisition of XenneX, Inc. ("XenneX") through a merger of XenneX into LifeMap Sciences. Through the merger, XenneX stockholders received, in the aggregate, 1,429,380 shares of LifeMap Sciences common stock, which represented approximately 13.7% of the LifeMap Sciences common stock outstanding upon the closing of the transaction. XenneX shareholders also received approximately 448,429 BioTime common shares as part of the transaction. Through the merger, LifeMap Sciences acquired all of XenneX's assets, including cash, accounts receivables, prepaid assets, licenses, and assumed XenneX's obligations, which at May 18, 2012 totaled approximately \$572,826 and primarily consisted of trade payables, deferred subscription revenues, and distributions due to former XenneX shareholders.

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 May 18, 2012. 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 \$4,304,099 is being allocated as indicated:

### Components of the purchase price:

BioTime common shares	\$	1,802,684
LifeMap Sciences common shares		2,501,415
Total purchase price	\$	<u>4,304,099</u>

### Preliminary allocation of purchase price:

#### Assets acquired and liabilities assumed:

Cash	\$	292,387
Other current assets		311,118
Intangible assets		4,273,420
Current liabilities		(294,572)
Cash distributable to sellers		<u>(278,254)</u>
Net assets acquired	\$	<u>4,304,099</u>

The fair value of the BioTime shares issued was \$4.02, the closing price as reported on the NYSE MKT on May 18, 2012, the date the merger was finalized. The fair value of the LifeMap Sciences shares issued was \$1.75 as determined by negotiation between BioTime, LifeMap Sciences and XenneX and its stockholders and is consistent with an internal valuation analysis completed by BioTime.

## 9. Asset Contribution Agreement

On January 4, 2013, BioTime and Asterias entered into an Asset Contribution Agreement with Geron Corporation (“Geron”) pursuant to which BioTime and Geron will concurrently contribute certain assets to Asterias in exchange for shares of Asterias common stock. Closing of the asset contribution transaction is expected to occur no later than September 30, 2013.

Pursuant to the Asset Contribution Agreement, Geron has agreed to contribute certain assets related to its discontinued stem cell research and development programs, including certain patents and know-how related to human embryonic stem cells; certain biological materials and reagents; certain laboratory equipment; certain contracts; and certain product clinical trials, in exchange for shares of Asterias common stock, and BioTime has agreed to contribute 8,902,077 common shares; warrants to subscribe for and purchase 8,000,000 additional common shares; \$5,000,000 in cash; 10% of the shares of common stock of OrthoCyte Corporation issued and outstanding on the date of the Asset Contribution Agreement; 6% of the ordinary shares of our subsidiary Cell Cure Neurosciences issued and outstanding on the date of the Asset Contribution Agreement; and a quantity of certain human hES cell lines produced under cGMP, and a non-exclusive, world-wide, royalty-free license to use those hES cell lines and certain patents pertaining to stem cell differentiation technology, in exchange for Asterias common stock and warrants to purchase Asterias common stock.

A private investor has agreed to contribute \$5,000,000 in cash to Asterias for 2,136,000 shares of Asterias Series B common stock, and warrants to purchase 350,000 additional shares of Asterias Series B common stock. That investment will be made in conjunction with the closing under the Asset Contribution Agreement. If for any reason the private investor fails to make the \$5,000,000 contribution, BioTime will contribute cash, BioTime common shares, or a combination of cash and BioTime common shares to Asterias in an amount equal to the cash not contributed by the private investor.

The same private investor invested \$5,000,000 in BioTime by purchasing, in two tranches, an aggregate of 1,350,000 BioTime common shares and warrants to purchase approximately 650,000 additional BioTime common shares. The first tranche of \$2,000,000 was funded in January 2013, and BioTime issued to the investor 540,000 common shares and 259,999 warrants. The second tranche of \$3,000,000 was funded in April 2013, and BioTime issued to the investor 810,000 common shares and 389,999 warrants.

Asterias will assume all obligations and liabilities in connection with the assets contributed by Geron, to the extent such obligations and liabilities arise after the closing date of the Asset Contribution Agreement, including certain obligations and liabilities to provide follow-up procedures with patients who participated in Geron’s clinical trials.

Upon the closing under the Asset Contribution Agreement, BioTime will own 21,773,340 shares of Asterias Series B common stock and Geron will own 6,537,779 shares of Asterias Series A common stock. Upon the sale of Asterias shares to the private investor, the private investor will own 2,136,000 shares of Asterias Series B common stock.

Geron has agreed to distribute to its stockholders on a pro rata basis the shares of Asterias Series A common stock that Geron receives in the asset contribution transaction following the closing under the Asset Contribution Agreement. Following that distribution by Geron, Asterias will distribute to the holders of its Series A common stock on a pro rata basis the 8,000,000 BioTime warrants that it receives under the Asset Contribution Agreement.



Following the distributions of the Asterias Series A common stock by Geron to its stockholders, BioTime will own, including the shares of Asterias Series B common stock that BioTime presently owns, approximately 71.6% of the outstanding Asterias common stock, the Geron stockholders will own approximately 21.4% of the outstanding Asterias common stock and the private investor will own approximately 7.0%, of the outstanding Asterias common stock.

BioTime will also receive warrants to purchase 3,150,000 shares of Asterias Series B common stock and the private investor will receive warrants to purchase 350,000 shares of Asterias Series B common stock (the "Asterias Warrants"). The Asterias Warrants will have an exercise price of \$5.00 per share and a term of three years. The exercise price per share and number of shares that may be purchased upon the exercise of the Asterias Warrants will be subject to adjustment in the event of any Asterias stock split, reverse stock split, stock dividend, reclassification of shares and certain other transactions.

The Asterias Series A and Series B common stock will be identical in most respects, however, Asterias will be entitled to make certain distributions or pay dividends, other than stock dividends, on its Series A common stock, without making a distribution or paying a dividend on its Series B common stock. The Asterias Series B common stock may be converted into Asterias Series A common stock, on a share for share basis, at Asterias' election, only after Geron distributes to its stockholders the Asterias Series A common stock issued under the Asset Contribution Agreement and Asterias subsequently distributes to the Asterias Series A common stock holders the 8,000,000 BioTime warrants that Asterias will receive from BioTime under the Asset Contribution Agreement.

Closing of the asset contribution transaction is subject to certain negotiated conditions, including the effectiveness of registration statements under the Securities Act of 1933 filed by BioTime and Asterias.

Closing of the cash contribution by the private investor is also subject to certain negotiated closing conditions, including the closing of the asset contribution transaction.

## 10. Segment Information

BioTime's executive management team represents its chief decision maker. To date, BioTime's management has viewed BioTime's operations as one segment that includes, the research and development of therapeutic products for oncology, orthopedics, retinal and neurological diseases and disorders, blood and vascular system diseases and disorders, blood plasma volume expansion, diagnostic products for the early detection of cancer, and hydrogel products that may be used in surgery, and products for human embryonic stem cell research. As a result, the financial information disclosed materially represents all of the financial information related to BioTime's sole operating segment.

## 11. Unaudited Pro Forma Interim Financial Information – Six Months Ended June 30, 2013 and 2012

The following unaudited pro forma information gives effect to the merger with XenneX as if the merger took place on January 1, 2012. 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.

	<b>Six Months Ended June 30,</b>	
	<b>2013</b>	<b>2012</b>
	<b>(Unaudited)</b>	<b>(Unaudited)</b>
Revenues	\$ 1,824,290	\$ 1,873,701
Net loss available to common shareholders	\$ (15,105,097)	\$ (10,326,605)
Net loss per common share – basic and diluted	\$ (0.29)	\$ (0.20)

## 12. Subsequent Events

These condensed consolidated financial statements were approved by management and the Board of Directors, and were issued on August 6, 2013. Subsequent events have been evaluated through that date.

On August 2, 2013, Asterias purchased certain research equipment and supplies for \$1,090,000. BioTime advanced to Asterias the funds required for the purchase.

## 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 and six months ended June 30, 2013 and 2012, 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 June 30, 2013 as compared to the quarter ended June 30, 2012. This discussion should be read in conjunction with our Condensed Consolidated Financial Statements for the three and six months ended June 30, 2013 and 2012 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 *PureStem*<sup>TM</sup> human embryonic progenitor cells (hEPC) (which we previously called *ACTCellerate*<sup>TM</sup> cell line) and associated *ESpan*<sup>TM</sup> culture media, *HyStem*<sup>®</sup> hydrogels, human embryonic stem cell lines, and royalties from *Hextend*<sup>®</sup>. Potential near-term therapeutic and diagnostic product opportunities include *Renevia*<sup>TM</sup> (formerly known as *HyStem*<sup>®</sup>-Rx) as a cell delivery device expected to enter clinical trials in Europe in 2013, and the initiation of clinical studies *PanC-Dx*<sup>TM</sup> as a novel blood-based cancer screen by the end of 2013. 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 <http://bioreagents.lifemaps.com>. We also market human embryonic progenitor cell (“hEPCs”), which are called *PureStem*<sup>TM</sup> progenitors and were developed using *ACTCellerate*<sup>TM</sup> 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 *PureStem*<sup>TM</sup> progenitors are also available for purchase through <http://bioreagents.lifemaps.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 and diagnostics 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 that could be derived from 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.

Certain BioTime’s research products, such as *HyStem*<sup>®</sup> hydrogels and ESI hES lines have the advantage of being “translatable to the clinic” meaning that these products are available as economic research grade products and at a therapeutic grade; allowing researchers more assurance that they will be acceptable for use in future clinical trials.

Our *HyStem*<sup>®</sup> hydrogel product line is one of the components in our near-term revenue strategy. *HyStem*<sup>®</sup> 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*<sup>®</sup> is a unique hydrogel that has been shown to support cellular attachment and proliferation *in vivo*. Recent publications have highlighted the combined use of *HyStem* hydrogels with *PureStem* progenitors resulting in a combined product that produces cartilage-producing cell masses known as chondrocytes. We call this experimental product *HyStem*<sup>®</sup>-4D.

*Renovia*<sup>TM</sup> (formerly known as *HyStem*<sup>®</sup>-Rx) is a clinical grade formulation of *HyStem*<sup>®</sup>-C, a biocompatible, implantable hyaluronan and collagen-based matrix for cell delivery in human clinical applications. As an injectable product, *Renovia*<sup>TM</sup> 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*<sup>TM</sup> as a medical device. We expect to initiate clinical trials for CE marking in the European Union during 2013, subject to our receipt of regulatory approval to commence the trials.

Other *HyStem*<sup>®</sup> products are currently being used by researchers at a number of leading medical schools in pre-clinical studies of stem cell therapies, including research that we are funding at UCLA for the treatment of ischemic stroke. Other researchers are conducting work with *HyStem*<sup>®</sup> in research to facilitate wound healing, to treat brain cancer, vocal fold scarring, and for myocardial infarct repair. Our *HyStem*<sup>®</sup> hydrogels may have other applications when combined with the diverse and scalable cell types our scientists have isolated from hES cells.

Our subsidiary, OncoCyte Corporation, is developing *PanC-Dx*<sup>™</sup>, 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. OncoCyte intends to develop *PanC-Dx*<sup>™</sup> as a screen for breast and bladder cancer and to initially seek regulatory approval to market *PanC-Dx*<sup>™</sup> in Europe for one or both of those cancers before seeking regulatory approvals required to market the product in the U.S. and other countries.

Our subsidiary, LifeMap Sciences markets, sells and distributes *GeneCards*<sup>®</sup>, the leading human gene database, as part of an integrated database suite that includes *LifeMap Discovery*<sup>™</sup>, the database of embryonic development, stem cell research and regenerative medicine; and *MalaCards*, the human disease database. LifeMap Sciences also markets *PanDaTox*, a database that can be used to identify genes and intergenic regions that are unclonable in *E. coli*, to aid in the discovery of new antibiotics and biotechnologically beneficial functional genes.

LifeMap Sciences is also the internet sales and marketing arm of our research products for sale through the website <http://bioreagents.lifemaps.com>. LifeMap Sciences will utilize its databases as part of its online marketing strategy for our research products to reach life sciences researchers at biotech and pharmaceutical companies and at academic institutions and research hospitals worldwide. We now offer 23 *PureStem*<sup>™</sup> hEPC and five hES cell lines developed under cGMP by our subsidiary ESI for sale, and hES cell lines carrying inherited genetic diseases. The hES cell lines developed by ESI 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 anticipate adding additional cell lines and related *ESpan*<sup>™</sup> growth media and differentiation kits over time. LifeMap Sciences will also market research products produced by other companies.

During January 2013, we entered into an Asset Contribution Agreement with our subsidiary Asterias Biotherapeutics, Inc. (“Asterias,” formerly known as BioTime Acquisition Corporation) and Geron Corporation pursuant to which Asterias will acquire a significant portfolio of patents and patent applications, cell lines, and hES technology and know-how related to potential therapeutic products in various stages of development. Two of the products under development have already been used in early stage clinical trials. The acquisition of the Geron stem cell assets is expected to occur no later than September 30, 2013. The completion of the transaction is subject to the satisfaction of certain conditions.

The following table shows our subsidiaries, their respective principal fields of business, our percentage ownership as at June 30, 2013, 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	62.5%	Israel
ReCyte Therapeutics, Inc. (formerly Embryome Sciences, Inc.)	Vascular disorders, including cardiovascular-related diseases, vascular injuries, and acquired lymphedema complications of cancer treatment  Stem cell-derived endothelial progenitor cells for research, drug testing, and therapeutics; iPS cell banking	94.8%	USA
BioTime Asia, Limited	Stem cell products for research	81%	Hong Kong
LifeMap Sciences, Inc.	Genetic, disease, and stem cell databases; sale of stem cell products for research	73.2%	USA
LifeMap Sciences, Ltd.	Stem cell database	(1)	Israel
Asterias Biotherapeutics, Inc.	Research, development and commercialization of human therapeutic products from stem cells	96.7%(2)	USA

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

(2) We expect our percentage ownership will be reduced to approximately 71.6% after Asterias issues common stock to us and Geron pursuant to the Asset Contribution Agreement and sells common stock and warrants to a private investor for cash in a related transaction. See Note 9 to the condensed consolidated interim financial statements.

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*<sup>®</sup>, 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*<sup>®</sup> maintains circulatory system fluid volume and blood pressure, and keeps vital organs perfused during surgery and trauma care. *Hextend*<sup>®</sup> 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*<sup>®</sup>, *Hextend*<sup>®</sup> and *PentaLyte*<sup>®</sup> are registered trademarks of BioTime, Inc., and *Renevia*<sup>™</sup>, *PureStem*<sup>™</sup>, *ESpan*<sup>™</sup>, and *ESpy*<sup>®</sup> are trademarks of BioTime, Inc. *ACTCellerate*<sup>™</sup> is a trademark licensed to us by Advanced Cell Technology, Inc. *ReCyte*<sup>™</sup> is a trademark of ReCyte Therapeutics, Inc. *PanC-Dx*<sup>™</sup> is a trademark of OncoCyte Corporation. *GeneCards*<sup>®</sup> is a registered trademark of Yeda Research and Development Co. Ltd.

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.

## Research and Development Expenses

The following table shows the approximate percentages of our total research and development expenses of \$10,975,825 and \$8,773,302 allocated to our primary research and development projects during the three and six months ended June 30, 2013 and 2012, respectively.

Company	Program	Three Months Ended June 30,		Six Months Ended June 30,	
		2013	2012	2013	2012
BioTime and ESI	<i>ACTCellerate</i> <sup>™</sup> hPCEs, GMP hES cell lines, and related research products	13.5%	16.6%	13.2%	16.3%
BioTime	<i>ACTCellerate</i> <sup>™</sup> technology	–%	2.3%	1.8%	5.6%
BioTime	Hydrogel products and <i>HyStem</i> <sup>®</sup> research	20.6%	20.6%	21.1%	15.9%
OncoCyte	Cancer therapy and diagnosis	12.6%	17.7%	12.8%	19.1%
OrthoCyte	Orthopedic therapy	6.3%	5.4%	5.5%	4.8%
ReCyte Therapeutics	IPS and vascular therapy	5.8%	8.8%	5.8%	7.7%
BioTime	<i>Hextend</i> <sup>®</sup>	0.4%	0.9%	0.4%	2.7%
BioTime Asia	Stem cell products for research	0.1%	1.1%	0.1%	0.9%
Cell Cure Neurosciences	<i>OpRegen</i> <sup>®</sup> , <i>OpRegen-Plus</i> <sup>®</sup> , and neurological disease therapies	18.4%	16.1%	20.8%	18.2%
LifeMap	Stem cell database	11.7%	10.5%	11.4%	8.8%
Asterias	hESC-based cell therapy assets to be acquired from Geron Corporation	10.6%	–%	7.1%	–%

## Critical Accounting Policies

**Revenue recognition** – We comply with SEC Staff Accounting Bulletin guidance on revenue recognition. Royalty revenues consist of product royalty payments. License fee revenues consist of fees under license agreements and are recognized when earned and reasonably estimable and also include subscription and advertising revenue from our online databases based upon respective subscription or advertising periods. 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 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.

*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 5 to the condensed consolidated interim financial statements.

*Principles of consolidation* – Our consolidated financial statements include the accounts of our wholly-owned subsidiaries, OrthoCyte, and ESI, the accounts of ReCyte Therapeutics, a subsidiary of which we owned approximately 94.8% of the outstanding shares of common stock as of June 30, 2013; the accounts of OncoCyte, a subsidiary of which we owned approximately 75.3% of the outstanding shares of common stock as of June 30, 2013; the accounts of BioTime Asia, a subsidiary of which we owned approximately 81.0% of the outstanding shares as of June 30, 2013, the accounts of Cell Cure Neurosciences, a subsidiary of which we owned approximately 62.5% of the outstanding shares as of June 30, 2013, the accounts of LifeMap Sciences, a subsidiary of which we owned approximately 73.2% of the outstanding shares as of June 30, 2013, and the accounts of Asterias Biotherapeutics, a subsidiary of which we owned 96.7% of the outstanding shares as of June 30, 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

	<b>Three Months Ended</b>		<b>\$ Increase/ Decrease</b>	<b>% Increase/ Decrease</b>
	<b>June 30,</b>			
	<b>2013</b>	<b>2012</b>		
License fees	\$ 362,249	\$ 175,419	\$+186,830	+107%
Royalties from product sales	103,315	126,455	-23,140	-18%
Grant income	693,480	672,537	+20,943	+3%
Sales of research products and services	57,281	59,253	-1,972	-3%
<b>Total revenues</b>	<b>1,216,325</b>	<b>1,033,664</b>	<b>+182,661</b>	<b>+18%</b>
Cost of sales	(180,811)	(83,918)	+96,893	+115%
<b>Total revenues, net</b>	<b>1,035,514</b>	<b>949,746</b>	<b>+85,768</b>	<b>+9%</b>

	<b>Six Months Ended</b>		<b>\$ Increase/ Decrease</b>	<b>% Increase/ Decrease</b>
	<b>June 30,</b>			
	<b>2013</b>	<b>2012</b>		
License fees	\$ 712,078	\$ 211,887	\$+500,191	+236%
Royalties from product sales	210,914	273,857	-62,943	-23%
Grant income	777,293	1,074,771	-297,478	-28%
Sales of research products and services	124,005	127,037	-3,032	-2%
<b>Total revenues</b>	<b>1,824,290</b>	<b>1,687,552</b>	<b>+136,738</b>	<b>+8%</b>
Cost of sales	(363,560)	(105,497)	+258,063	+245%
<b>Total revenues, net</b>	<b>1,460,730</b>	<b>1,582,055</b>	<b>-121,325</b>	<b>-8%</b>



Our license fee revenues for the three and six months ended June 30, 2013 amounted to \$362,249 and \$712,078, respectively. License fee revenues for the same periods in 2012 amounted to \$175,419 and \$211,887, respectively. License fee revenues for the six months ended June 30, 2013 and 2012 include subscription and advertising revenues of \$638,148 and \$138,763, respectively, from LifeMap Sciences' online database business primarily related to its *GeneCards*<sup>®</sup> database which LifeMap Sciences began marketing, selling and distributing after its acquisition of XenneX, Inc. during May 2012. The 236% increases in license fee revenue during the six months ended June 30, 2013 is entirely attributed to this new subscription and advertising revenue.

License fee revenues also include amortization of license fees from CJ which we received during April 2003 and July 2004, and the license fees from Summit which we received during December 2004 and April and October of 2005. Full recognition of those license fees were deferred and is being recognized over the lives of the contracts, which have been estimated to last until approximately 2019 based on the current expected lives of the governing patents covering our products in Korea and Japan. Amortization of such license fees during the three and six months ended June 30, 2013 and 2012 amounted to \$36,468 and \$72,936, respectively.

Under our license agreements with Hospira and CJ, our licensees report sales of *Hextend*<sup>®</sup> and pay us the royalties due on account of such sales within 90 days after the end of each calendar quarter. We recognize those 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 first quarter of 2013 were not recognized until the second quarter of fiscal year 2013.

Our royalty revenues from product sales for the three months ended June 30, 2013 primarily consist of royalties on sales of *Hextend*<sup>®</sup> made by Hospira and CJ during the period beginning January 1, 2013 and ending March 31, 2013. Royalty revenues recognized in the second quarter of 2013 were \$82,098 from Hospira, \$20,935 from CJ, and \$282 from Millipore. Total royalties of \$103,315 for the quarter decreased by \$23,140 or 18% from royalties of \$126,455 received during the same period last year. Total royalties of \$210,914 for the six month period ended June 30, 2013 decreased by \$62,943 or 23% from royalties of \$273,857 during the same period last year.

The decrease in royalties is attributable to a decrease in *Hextend*<sup>®</sup> sales in the U.S. and in the Republic of Korea. The decrease in royalties received from Hospira is primarily due to the decline in the price of hetastarch-based products in the market. The blood volume expander market continues to contract as hospitals continue to shift 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*<sup>®</sup>. Hospira has implemented price reductions for *Hextend*<sup>®</sup> in an attempt to maintain market share. We expect royalty revenues from product sales to continue to decline as a percentage of total revenue.

In addition to price competition, sales of *Hextend*<sup>®</sup> could be adversely affected if certain safety labeling changes proposed by the FDA go into effect. During June 2013, we were notified by the FDA that they believe that new safety labeling should be required for the entire class of hydroxyethyl starch products, including *Hextend*<sup>®</sup>. The proposed labeling change would include a boxed warning that would state that the use of *Hextend*<sup>®</sup> increases the risk of mortality and renal injury requiring renal replacement therapy in critically ill adult patients, including patients with sepsis and those admitted to the ICU, and that *Hextend*<sup>®</sup> should not be used in critically ill adult patients, including patients with sepsis and those admitted to the ICU. New warning and precaution information would also be required along with new information about contraindications, adverse reactions, and information about certain recent studies. The warning and precautions would state that the use of *Hextend*<sup>®</sup> should be avoided in patients with pre-existing renal dysfunction and in patients undergoing open heart surgery in association with cardiopulmonary bypass due to the risk of excessive bleeding.

We have submitted a rebuttal to the FDA requesting that their proposed labeling changes not apply to *Hextend*<sup>®</sup> because the data on which the FDA based its request studied the effects of hydroxyethyl starches in saline solutions and not *Hextend*<sup>®</sup>, while other studies that did evaluate the use of *Hextend*<sup>®</sup> suggest that *Hextend*<sup>®</sup> does not cause increased mortality and bleeding or severe renal injury, especially when used in volumes less than 1,500 ml. Moreover, FDA safety database information reveals that since the use of *Hextend*<sup>®</sup> began in 1999, based on approximately 5.7 million units of *Hextend*<sup>®</sup> distributed in the United States, there were only 10 reports of patients that experienced product related adverse events.

If the FDA determines to require the proposed labeling change, sales of *Hextend*<sup>®</sup> could be adversely affected. It is not possible at this time to determine what impact a labeling change applicable only to hydroxyethyl starch products other than *Hextend*<sup>®</sup> would have on our product since some users of hydroxyethyl starch in saline products might switch to *Hextend*<sup>®</sup> while others might elect to abandon the use of all hydroxyethyl starch products, including *Hextend*<sup>®</sup>.

Based on sales of *Hextend*<sup>®</sup> that occurred during the second quarter of 2013, we received royalties of \$60,920 from Hospira and \$19,672 from CJ during the third quarter of 2013. Total royalties of \$80,592, which will be recognized during the third quarter, decreased 40% from royalties of \$133,946 received during the same period last year.

Total grant revenue for the three months ended June 30, 2013 increased by \$20,943 or 3% primarily attributed to \$662,052 recognized through Cell Cure Neurosciences. Total grant revenues for the six months ended June 30, 2013 decreased by \$297,478 or 28% primarily due to the completion of a research grant from the California Institute of Regenerative Medicine (“CIRM”) in August 31, 2012 offset by \$697,036 recognized through Cell Cure Neurosciences. We received no CIRM grant revenue in 2013. Grant revenue in the three and six months ended June 30, 2013 also included nil and \$4,022 recognized through ESI, and \$31,428 and \$76,236, respectively of a \$335,900 grant awarded to us by the NIH that expires on September 29, 2013.

#### Operating Expenses

	Three Months Ended		\$ Increase/ Decrease	% Increase/ Decrease
	June 30,			
	2013	2012		
Research and development expenses	\$ (5,530,395)	\$ (4,615,436)	\$ +914,959	+20%
General and administrative expenses	(3,621,570)	(2,413,641)	+1,207,929	+50%
Interest income, net	579	3,355	-2,776	-83%
Other (expense)/income, net	(80,541)	85,260	-165,801	-194%

  

	Six Months Ended		\$ Increase/ Decrease	% Increase/ Decrease
	June 30,			
	2013	2012		
Research and development expenses	\$ (10,975,825)	\$ (8,773,302)	\$ +2,202,523	+25%
General and administrative expenses	(7,005,091)	(4,802,337)	+2,202,754	+46%
Interest income, net	1,522	11,636	-10,114	-87%
Other expense, net	(109,520)	(240,005)	-130,485	-54%

*Research and development expenses* – Research and development expenses for the three and six months ended June 30, 2013 increased to \$5,530,395 and \$10,975,825, respectively from \$4,615,436 and \$8,773,302 for the same periods in 2012. Research and development expenses during the three and six months ended June 30, 2013 include \$642,573 and \$1,287,145, respectively, derived from the amortization of patent technology related to our acquisition of ESI and Cell Cure Neurosciences in May and October 2010, respectively, from our acquisition of assets from Cell Targeting, Inc., and the merger of Glycosan BioSystems, Inc. into OrthoCyte in January and March 2011, respectively, and the merger of XenneX, Inc. into LifeMap Sciences in May 2012. Those amortization expenses increased by \$54,878 and \$161,714 during the three and six months ended June 30, 2013, respectively, compared to the same periods in 2012. Research and development expenses also include laboratory study expenses, patent and technology license fees, employee compensation, rent, insurance, and science-related consultants' fees which are allocated to research and development expenses.

The increase in research and development expenses of \$914,959 during three months ended June 30, 2013 compared to the same period in 2012 is also attributable to an increase of \$348,114 in employee compensation and related costs allocated to research and development expenses, an increase of \$78,460 in our *HyStem*<sup>®</sup> program related research expenses, including the clinical development of *Renevia*<sup>™</sup>, an increase of \$114,080 in outside research and research related outside services, an increase of \$127,653 in rent related to Asterias' new facility, and an increase of \$304,318 in Cell Cure Neurosciences research and development expenses. These increases in 2013 over 2012 were offset in part by a decrease of \$58,539 in patent related legal expenses and a decrease of \$56,944 in ESI research and development expenses.

The increase in research and development expenses for the six months ended June 30, 2013 and 2012, is also attributable to an increase of \$680,753 in employee compensation and related costs allocated to research and development expenses, an increase of \$313,168 in *HyStem*<sup>®</sup> program related research expenses, an increase of \$212,861 in outside research and research related outside services, an increase of \$239,329 in rent related to Asterias' new facility, an increase of \$40,733 in stock-based compensation to employees, and an increase of \$796,228 in Cell Cure Neurosciences research and development expenses. These increases were offset in part by a decrease of \$158,171 in licenses, patent and trademark related fees and legal fees, and \$95,804 in ESI research and development expenses.

The following table shows the amount of our total research and development expenses allocated to our primary research and development projects during the six months ended June 30, 2013 and 2012.

Company	Program	Six Months Ended June 30,	
		2013	2012
BioTime and ESI	ACTCellerate™ hPECs, GMP hES cell lines, and related research products	\$ 1,445,600	\$ 1,434,376
BioTime	ACTCellerate™ technology	\$ 199,447	\$ 495,850
BioTime	Hydrogel products and HyStem® research	\$ 2,312,730	\$ 1,392,476
OncoCyte	Cancer therapy and diagnosis	\$ 1,406,873	\$ 1,672,536
OrthoCyte	Orthopedic therapy	\$ 603,438	\$ 418,102
ReCyte Therapeutics	IPS and vascular therapy	\$ 634,811	\$ 676,285
BioTime	Hextend®	\$ 44,163	\$ 234,444
BioTime Asia	Stem cell products for research	\$ 16,055	\$ 83,306
Cell Cure Neurosciences	OpRegen®, OpRegen-Plus®, and neurological disease therapies	\$ 2,281,952	\$ 1,598,142
LifeMap	Stem cell database	\$ 1,248,767	\$ 767,785
Asterias	hESC-based cell therapy assets to be acquired from Geron Corporation	\$ 781,989	\$ –

*General and administrative expenses* – General and administrative expenses for the three and six months ended June 30, 2013 increased to \$3,621,570 and \$7,005,091, respectively, from \$2,413,641 and \$4,802,337 for the same periods in 2012. 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 which are allocated to general and administrative expenses.

The increase in general and administrative expenses of \$1,207,929 for the three months ended June 30, 2013 compared to the same period in 2012 is primarily attributable to an increase of \$270,463 in employee compensation and related costs allocated to general and administrative expenses, an increase of \$65,414 in stock-based compensation to employees and consultants, an increase of \$249,914 in legal fees, an increase of \$103,492 in marketing and advertisement related expenses, an increase of \$180,846 in investor and public relations expenses, transfer agent, stock listing and registration fees, an increase of \$92,926 in recruiting service expenses, an increase of \$90,139 in building and equipment rental and maintenance fees allocated to general and administrative expenses, an increase of \$57,889 in travel, lodging and meals allocated to general and administrative expenses, an increase of \$56,960 in general office supplies and expenses, an increase of \$57,250 in cash compensation paid to our independent directors, and an increase of \$75,695 in Cell Cure Neurosciences general and administrative expenses. These increases were in part offset by a decrease of \$73,258 in general outside services.

The increase in general and administrative expenses of \$2,202,754 for the six months ended June 30, 2013 compared to the same period in 2012 is generally attributable to an increase of \$560,020 in employee compensation and related costs allocated to general and administrative expenses, an increase of \$189,116 in stock-based compensation to employees and consultants, an increase of \$726,163 in legal fees, an increase of \$200,078 in investor and public relations expenses, transfer agent, stock listing and registration fees, an increase of \$155,043 in accounting and tax services, an increase of \$113,250 in cash compensation paid to our independent directors, an increase of \$115,823 in building and equipment rental and maintenance fees allocated to general and administrative expenses, an increase marketing and advertisement related expenses, an increase of \$99,186 in marketing and advertisement related expenses, an increase of \$92,999 in recruiting service expenses, and an increase of \$79,266 in general office supplies and expenses. The increase in legal and accounting expenses are primarily due to the start-up and transaction related expenses of Asterias. These increases are in part offset by a decrease of \$64,430 in general outside services, and a decrease of \$69,466 in ESI general and administrative expenses.

*Other expense/income* – Other expense/income for the three and six months ended 2013 consists primarily of \$92,464 and \$115,153, respectively of foreign currency transaction loss compared to \$103,475 and \$5,308, respectively of foreign currency transaction gain in the same periods in 2012. Other expenses in the six months ended June 30, 2012 also include reversal of \$204,348 in revenues recognized by ESI. The \$204,348 represents revenue recognized in 2011 upon the shipment of cell lines in accordance with an agreement between ESI and a customer. The revenue for the cell lines shipped to the customer was reversed during the first quarter of 2012 pending the final completion of audits and acceptance of vials by the customer that was incorrectly believed to have occurred in December 2011.

#### *Income Taxes*

During the three and six months ended June 30, 2013 and 2012, 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 June 30, 2013, we had \$14,306,296 of cash and cash equivalents on hand. We will depend upon revenue from the sale of our research products, database subscription and advertising revenues, royalties from the sale of *Hextend*<sup>®</sup> by Hospira and CJ, and research grants as our principal sources of revenues for the near future. There is no assurance that any of our grant applications will be approved. Because our revenues are not presently sufficient to cover our operating expenses, we will also continue to 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.

On August 24, 2012, we entered into a Controlled Equity Offering SM sales agreement with Cantor Fitzgerald & Co. ("Cantor"), pursuant to which we have raised approximately \$13,000,000 through the sale of our common shares through Cantor acting as our sales agent. The offer and sale of our shares through Cantor has been registered pursuant to a registration statement filed under the Securities Act of 1933, as amended (the "Securities Act"). Under the sales agreement, Cantor may sell our common shares by any method permitted by law deemed to be an "at-the-market" offering as defined in Rule 415 under the Securities Act, including, but not limited to, sales made directly on NYSE MKT, on any other existing trading market for our common shares or to or through a market maker. Cantor may also sell our shares under the sales agreement by any other method permitted by law, including in privately negotiated transactions. Cantor has agreed in the sales agreement to use its commercially reasonable efforts to sell shares in accordance with our instructions (including any price, time or size limit or other customary parameters or conditions we may impose). The offering pursuant to the sales agreement will terminate upon the sale of all shares subject to the sales agreement or the earlier termination of the sales agreement as permitted by its terms. Cantor has also acted as a sales agent for certain of our subsidiaries that have sold BioTime common shares to raise capital for their operations. We contributed the BioTime common shares to the subsidiaries in exchange for subsidiary capital stock. The proceeds of the sale of BioTime shares by our subsidiaries belong to those subsidiaries. There is no assurance that we or our subsidiaries will be able to sell additional common shares through Cantor at prices acceptable to us, but we believe that our existing cash and cash equivalents, should be sufficient to fund our operations at least into the first quarter of 2014. See "Cash generated by financing activities" for additional information about sales of our equity securities through the Controlled Equity Offering and other transactions during the three and six months ended June 30, 2013.

We presently have issued and outstanding 1,751,615 common share purchase warrants, 50,000 of which are exercisable at a price of \$10.00 per share and will expire in April 2014, 506,613 of which are exercisable at a price of \$10.00 per share and will expire in May 2014, 649,998 of which are exercisable at a price of \$5 per share and will expire in January 2016, and 545,004 which are exercisable at a price of \$5.00 per share and will expire in June 2016. None of the warrants are publicly traded.

Upon consummation of the asset contribution transaction under the Asset Contribution Agreement, we will issue 8,000,000 common share purchase warrants to Asterias. Asterias will distribute the warrants it receives to the holders of its Series A common stock. Those warrants will have an exercise price of \$5.00 per share and will expire in five years from the date of issue. We expect that the warrants to be issued to Asterias will be 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 six months ended June 30, 2013, we received \$1,223,490 of cash in our operations. Our sources of that cash primarily consisted of \$88,946 of royalty revenues from Hospira, \$18,652 of royalty revenues from CJ, our final quarterly research grant payment of \$392,664 from CIRM, a \$53,779 research grant payment from the NIH, \$48,818 in foreign research grants, and \$619,637 from the sale of research products and subscription and advertisement revenues. During the same six month period in 2012, we received \$826,391 of cash in our operations. Our sources of that cash were \$215,064 of royalty revenues from Hospira, \$58,405 of royalty revenues from CJ, \$392,665 of research grant payment from CIRM, \$23,849 research grant payment from the NIH, and \$136,408 from the sale of research products.

#### *Cash used in operations*

During the six months ended June 30, 2013, our total research and development expenditures were \$10,975,825 and our general and administrative expenditures were \$7,005,091. Net loss attributable to BioTime for the six months ended June 30, 2013, amounted to \$15,282,391. Net cash used in operating activities during the six months ended June 30, 2013 amounted to \$14,465,239. The difference between the net loss and net cash used in operating activities during the period was primarily attributable to non-cash expenses and accrued revenues, including \$1,351,795 in stock-based compensation, amortization of \$1,285,145 in intangible assets, \$32,559 amortization of deferred consulting fees, \$54,750 amortization of deferred license fees, \$62,381 in deferred revenues, and \$253,215 in depreciation expense. This overall difference was offset to some extent by \$269,365 grant receivables, amortization of \$75,914 in deferred license and royalty revenues, \$414,449 in prepaid expenses, \$25,701 in accounts receivables, \$30,865 in accounts payable and accrued liabilities, \$41,731 in other long-term liabilities, and net loss of \$1,346,503 allocable to the noncontrolling interest in our subsidiaries.

### *Cash flows from investing activities*

During the six months ended June 30, 2013, \$789,547 was used for investing activities. The components of this cash were \$735,124 used in the purchase of equipment and \$54,423 paid for security deposits.

### *Cash generated by financing activities*

During the six months ended June 30, 2013, we raised gross proceeds of \$11,571,953 from the sale of 2,594,156 BioTime common shares at a weighted average price of \$4.46 per share in the open market through our Controlled Equity Offering facility with Cantor and through the sale of BioTime common shares held by our majority owned subsidiaries, LifeMap Sciences and Cell Cure Neurosciences. The proceeds of the sale of BioTime shares by our subsidiaries belong to those subsidiaries.

On January 4, 2013, BioTime and a private investor entered into a Stock and Warrant Purchase Agreement under which the investor agreed to invest \$5,000,000 in BioTime by purchasing, in two tranches, an aggregate of 1,350,000 BioTime common shares and warrants to purchase approximately 650,000 additional BioTime common shares. The first tranche of \$2,000,000 was funded on January 14, 2013, and we issued to the investor 540,000 common shares and 259,999 warrants. We received the second tranche of \$3,000,000 on April 10, 2013 at which time we issued to the investor 810,000 common shares, and warrants to purchase an additional 389,999 common shares at an exercise price of \$5 per share.

On March 14, 2013, ReCyte Therapeutics and one of its shareholders entered into a Stock Purchase Agreement under which the shareholder agreed to purchase 81,169 additional ReCyte Therapeutics common shares for approximately \$250,000, reflecting a purchase price of \$3.08 per share. In March 2013, ReCyte Therapeutics received \$125,000 for which 40,584 ReCyte Therapeutics common shares were issued. ReCyte Therapeutics received the remaining \$125,000 in May 2013 at which time it issued the remaining 40,585 common shares.

On June 6, 2013, we sold an aggregate of 2,180,016 common shares and 545,004 warrants to purchase common shares, in "units" with each unit consisting of one common share and one-quarter of a warrant, at an offering price of \$4.155 per unit, to certain investors through an offering registered under the Securities Act. We received gross proceeds of \$9,057,967 from the sale of the common shares and warrants. The warrants have an initial exercise price of \$5.00 per share and are exercisable during the five year period beginning on the date of issuance, June 6, 2013. We paid certain participating broker-dealers fees of \$121,209 representing 5% of the aggregate purchase price of the units purchased by investors introduced to us by them.

## Contractual obligations

As of June 30, 2013, our contractual obligations for the next five years and thereafter were as follows:

Contractual Obligations (1)	Principal Payments Due by Period				
	Total	Less Than 1 Year	1-3 Years	4-5 Years	After 5 Years
Operating leases (2)	\$2,252,613	\$532,668	\$1,687,320	\$32,625	\$-

(1) This table does not include payments to key employees that could arise if they were involuntary terminated or if their employment terminated following a change in control.

(2) Includes the lease of our principal office and laboratory facilities in Alameda, California, and leases of the offices and laboratory facilities of our subsidiaries Asterias, ESI, LifeMap Sciences, and Cell Cure Neurosciences.

## Future capital needs

We currently depend upon revenue from the sale of our stem cell research products, subscriptions and advertising from LifeMap Sciences' database products, sales of *HyStem*<sup>®</sup> hydrogel for research use, royalties from the sale of *Hextend*<sup>®</sup> by Hospira and CJ, and research grants. Any significant loss in any of these revenue sources could impact our future capital needs. Our product sales and royalty revenues may be supplemented by any license fees that we may receive if we enter into new commercial license agreements for our products or technology.

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.

The market value and the volatility of our stock price, as well as general market conditions, could impact our ability to raise capital on favorable terms, or at all. Any equity financing we obtain may further dilute or otherwise impair the ownership interests of our current shareholders. If we fail to generate positive cash flows or fail to obtain additional capital when required, we could modify, delay or abandon some or all of our programs.

## 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 June 30, 2013, 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.

**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. However, upon consummation of the asset acquisition transaction under the Asset Contribution Agreement, Asterias will be substituted as the appellant in an appeal of certain decisions of the U.S. Patent and Trademark Office in two patent interference proceedings that were brought by Geron against ViaCyte, Inc.

**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 six months ended June 30, 2013 and for the fiscal years ended December 31, 2012, 2011, and 2010 were \$15,105,097, \$21,362,524, \$17,535,587, and \$10,287,280, respectively, and we had an accumulated deficit of \$117,178,103 as of June 30, 2013 and \$101,895,712, \$80,470,009, and \$63,954,509, as of December 31, 2012, 2011, and 2010, 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 and subscription fees for the database products marketed by our subsidiary LifeMap Sciences. 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 \$10,975,825 during the six months ended June 30, 2013, and \$18,116,688, \$13,699,691, and \$8,191,314 during the fiscal years ended December 31, 2012, 2011, and 2010, 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.

**Completion of the proposed acquisition of stem cell related assets by our subsidiary Asterias from Geron Corporation will result in an increase in our operating expenses and losses on a consolidated basis**

- Asterias will use the stem cell assets that it will acquire from Geron for the research and development of products for regenerative medicine. Asterias' research and development efforts will involve substantial expense, including but not limited to hiring additional research and management personnel, and the rent of a new office and research facility that will add to our losses on a consolidated basis for the near future.
- Asterias will become a public company in connection with the completion of the asset contribution transaction under the Asset Contribution Agreement and the distribution of Asterias Series A Common Stock by Geron to its stockholders. As a public company, Asterias will incur costs associated with audits of its financial statements, filing annual, quarterly, and other periodic reports with the SEC, holding annual shareholder meetings, listing its common shares for trading, and public relations and investor relations. These costs will be in addition to those incurred by BioTime for similar purposes.
- As a developer of pharmaceutical products derived from hES or iPS cells, Asterias will face substantially the same kind of risks that affect our business, as well as the risks related to our industry generally

**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 ("hES") 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 hES cells.

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

- *Hextend*<sup>®</sup> is presently the only plasma expander product that we have on the market, and it is being sold only in the U.S. and South Korea. The royalty revenues that we have received from sales of *Hextend*<sup>®</sup> 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 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*<sup>®</sup> 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*<sup>®</sup>, an artificial plasma volume expander, and Hospira and Baxter International, Inc. manufacture and sell a generic equivalent of *Hespan*<sup>®</sup>. Hospira also markets *Voluven*<sup>®</sup>, a plasma volume expander containing a 6% low molecular weight hydroxyethyl starch in saline solution.
- Competing products for the diagnosis and treatment of cancer are being manufactured and marketed by established pharmaceutical companies, and more cancer diagnostics and therapeutics are being developed by those companies and by other smaller biotechnology companies. Other companies, both large and small, are also working on the development of stem cell based therapies for the same diseases and disorders that are the focus of the research and development programs of our subsidiaries.
- 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.

#### **Sales of *Hextend*<sup>®</sup> could be adversely affected by a safety and use labeling change proposed by the FDA**

Sales of *Hextend*<sup>®</sup> could be adversely affected if certain safety labeling changes proposed by the FDA go into effect. During June 2013, we were notified by the FDA that they believe that new safety labeling should be required for the entire class of hydroxyethyl starch products, including *Hextend*<sup>®</sup>. The proposed labeling change would include a boxed warning that would state that the use of *Hextend*<sup>®</sup> increases the risk of mortality and renal injury requiring renal replacement therapy in critically ill adult patients, including patients with sepsis and those admitted to the ICU, and that *Hextend*<sup>®</sup> should not be used in critically ill adult patients, including patients with sepsis and those admitted to the ICU. New warning and precaution information would also be required along with new information about contraindications, adverse reactions, and information about certain recent studies. The warning and precautions would state that the use of *Hextend*<sup>®</sup> should be avoided in patients with pre-existing renal dysfunction and in patients undergoing open heart surgery in association with cardiopulmonary bypass due to the risk of excessive bleeding.

We have submitted a rebuttal to the FDA requesting that their proposed labeling changes not apply to *Hextend*<sup>®</sup> because the data on which the FDA based its request studied the effects of hydroxyethyl starches in saline solutions and not *Hextend*<sup>®</sup>, while other studies that did evaluate the use of *Hextend*<sup>®</sup> suggest that *Hextend*<sup>®</sup> does not cause increased mortality and bleeding or severe renal injury, especially when used in volumes less than 1,500 ml. Moreover, FDA safety database information reveals that since the use of *Hextend*<sup>®</sup> began in 1999, based on approximately 5.7 million units of *Hextend*<sup>®</sup> distributed in the United States, there were only 10 reports of patients that experienced product related adverse events.

If the FDA determines to require the proposed labeling change, sales of *Hextend*<sup>®</sup> could be adversely affected. It is not possible at this time to determine what impact a labeling change applicable only to hydroxyethyl starch products other than *Hextend*<sup>®</sup> would have on our product since some users of hydroxyethyl starch in saline products might switch to *Hextend*<sup>®</sup> while others might elect to abandon the use of all hydroxyethyl starch products, including *Hextend*<sup>®</sup>.

**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 June 30, 2013, we had \$14,306,296 of cash and cash equivalents on hand. Although we have raised approximately \$26,000,000 of equity capital during the six months period ended June 30, 2013, 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 have already curtailed the pace and scope of our plasma volume expander development efforts due to the limited amount of funds available, and we may have to postpone other 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. Asterias' stem cell research programs will be directed primarily by its Chief Executive Officer, Dr. Thomas Okarma, and by its President of Research and Development, Dr. Jane Lebkowski. The loss of the services of Dr. West, Dr. Okarma or Dr. Lebkowski 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**

Our experience in independently identifying acquisition candidates and integrating their operations with our company is limited to our acquisitions of ESI in 2010, Glycosan BioSystems, Inc. and Cell Targeting, Inc. in 2011, and XenneX, Inc. in 2012. During January 2013 we entered into an agreement for our subsidiary Asterias to acquire stem cell related assets from Geron. 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.

Operating our business through subsidiaries, some of which are located in foreign countries, also adds to the complexity of our internal control over financial reporting and adds to the risk of a system failure, an undetected improper use or expenditure of funds or other resources by a subsidiary, or a failure to properly report a transaction or financial results of a subsidiary. We allocate certain expenses among BioTime itself and one or more of our subsidiaries, which creates a risk that the allocations we make may not accurately reflect the benefit of an expenditure or use of financial or other resources by BioTime as the parent company and the subsidiaries among which the allocations are made. An inaccurate allocation may impact our consolidated financial results, particularly in the case of subsidiaries that we do not wholly own since our financial statements include adjustments to reflect the minority ownership interests in our subsidiaries held by others.

## **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.

**Clinical trial failures can occur at any stage of the testing and we may experience numerous unforeseen events during, or as a result of, the clinical trial process that could delay or prevent commercialization of our current or future drug candidates**

Clinical trial failures or delays can occur at any stage of the trials, and may be directly or indirectly caused by a variety of factors, including but not limited to:

- delays in securing clinical investigators or trial sites for our clinical trials;
- delays in obtaining Institutional Review Board (“IRB”) and other regulatory approvals to commence a clinical trial;
- slower than anticipated rates of patient recruitment and enrollment, or failing to reach the targeted number of patients due to competition for patients from other trial;
- limited or no availability of coverage, reimbursement and adequate payment from health maintenance organizations and other third party payers for the use of agents used in our clinical trials;
- negative or inconclusive results from clinical trials;
- unforeseen side effects interrupting, delaying or halting clinical trials of our drug candidates and possibly resulting in the FDA or other regulatory authorities denying approval of our drug candidates;
- unforeseen safety issues;
- uncertain dosing issues;
- approval and intro introduction of new therapies or changes in standards of practice or regulatory guidance that render our clinical trial endpoints or the targeting of our proposed indications obsolete;
- inability to monitor patients adequately during or after treatment or problems with investigator or patient compliance with the trial protocols;
- inability to replicate in large controlled studies safety and efficacy data obtained from a limited number of patients in uncontrolled trials;
- inability or unwillingness of medical investigators to follow our clinical protocols; and unavailability of clinical trial supplies certain dosing issues.

**Government-imposed bans or 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 bans or restrictions on the use of embryos or hES cells in research and development in the U.S. 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 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.



- 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*<sup>TM</sup> as a cancer diagnostic test, based on the presence of certain genetic markers for a variety of cancers. Because *PanC-Dx*<sup>TM</sup> 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 new guidelines issued by the United States Patent and Trademark Office (the “PTO”) 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 PTO for patents or applications filed before March 16, 2013 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 may 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.
- After March 16, 2013 a derivation proceeding may be instituted by the PTO or an inventor alleging that a patent or application was derived from the work of another inventor.
- Post Grant Review under the new America Invents Act will make available after March 16, 2013 opposition-like proceedings in the United States. As with the PTO interference proceedings, Post Grant Review proceedings will be very expensive to contest and can result in significant delays in obtaining patent protection or can result in a denial of a patent application.
- Oppositions to the issuance of patents may be filed under European patent law and the patent laws of certain other countries. As with the 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*<sup>®</sup> 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 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. As of September 16, 2012 our patents may be subject to inter partes review (replacing the inter partes reexamination proceeding), a proceeding in which a third party can challenge the validity of one of our patents.

## **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*<sup>®</sup> 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 possible future collaborations 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.**

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

There is a risk that we could become dependent upon one or more collaborative arrangements for product development or as a source of revenues from the sale of any products that may be developed by us alone or through one of the collaborative arrangements. A collaborative arrangement upon which we might depend might be terminated by our collaboration partner or they might determine not to actively pursue the development or commercialization of our products. A collaboration partner also may not be precluded from independently pursuing competing products and drug delivery approaches or technologies.

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

**We have 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*<sup>®</sup>. 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 sales representatives, or wholesale distributors for the commercial sale of our products.

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

**We do not have the ability to independently conduct clinical trials required to obtain regulatory approvals for our drug candidates.**

We will need to rely on third parties, such as contract research organizations, data management companies, contract clinical research associates, medical institutions, clinical investigators and contract laboratories to conduct any clinical trials that we may undertake for our products. We may also rely on third parties to assist with our preclinical development of drug candidates. If we outsource clinical trial we may be unable to directly control the timing, conduct and expense of our clinical trials. If we enlist third parties to conduct clinical trials and they fail to successfully carry out their contractual duties or regulatory obligations or fail to meet expected deadlines, if the third parties need to be replaced or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our preclinical development activities or clinical trials may be extended, delayed, suspended or terminated, and we may not be able to obtain regulatory approval for or successfully commercialize our drug candidates.

#### **Risks Related to the Asset Contribution Agreement**

**Asterias will assume Geron's appeal of two adverse patent rulings, and if the appeal is not successful, Asterias may not realize value from the Geron patent applications at issue in the appeal and might be precluded from developing therapies to treat certain diseases, such as diabetes.**

At the closing of the asset contribution transaction under the Asset Contribution Agreement, Asterias will be substituted for Geron as a party in interest in an appeal filed by Geron in the United States District Court for the Northern District of California, appealing two adverse rulings in favor of ViaCyte, Inc. (formerly Novocell Inc.) by the United States Patent and Trademark Office's Board of Patent Appeals and Interferences. These rulings related to interference proceedings involving patent filings relating to definitive endoderm cells. Geron had requested that the Board of Patent Appeals and Interferences declare this interference after ViaCyte was granted patent claims that conflicted with subject matter Geron filed in a patent application having an earlier priority date. Those Geron patent applications are among the patent assets that Geron will contribute to Asterias. Asterias will assume all liabilities arising with respect to the ViaCyte Appeal, other than expenses incurred by Geron relating to the ViaCyte Appeal prior to the closing of the asset contribution transaction. Appeals of this nature may involve costly and time-consuming legal proceedings and if Asterias is not successful in the appeal, these rulings may prevent or limit development of Asterias product candidates in certain fields such as diabetes treatment and Asterias may be unable to realize value from the patent applications at issue in the appeal.

**We and Asterias may be unable to complete the asset contribution transaction under the Asset Contribution Agreement, and failure to complete the transaction could adversely affect the market price of our common shares, our reputation, and our ability to obtain financing.**

We may be unable to complete the asset contribution transaction if the conditions to closing the transaction specified in the Asset Contribution Agreement are not satisfied.

The price at which our common shares trade on the NYSE MKT, and the daily trading volume, increased significantly after we announced the signing of the Asset Contribution Agreement. If the asset contribution transaction does not close or for any other reason, the trading price of our common shares could be immediately adversely affected.

Failure to close the asset contribution transaction could also harm our reputation and we may be viewed as a less attractive investment by investors.

**We could be liable to indemnify Geron for certain liabilities and must also bear the cost of an insurance policy for the benefit of Geron.**

We and Asterias have agreed to indemnify Geron from and against certain liabilities relating to (a) Geron's distribution of the Asterias Series A common stock to Geron's stockholders, (b) Asterias' distribution of the BioTime warrants, that we will contribute to Asterias under the Asset Purchase Agreement, to the holders of Asterias Series A common stock, and (c) any distribution of securities by Asterias to the holders of the Asterias Series A common stock within one year following the closing under the Asset Contribution Agreement, from the date of the first effective date of either of the registration statements filed by us and by Asterias with respect to the securities that we and Asterias will issue in the asset contribution transaction, through the fifth anniversary of the earliest to occur of the date on which all of the BioTime warrants that we will contribute to Asterias have either expired, or been exercised, cancelled or sold. We have also agreed to use our reasonable best efforts to obtain at our cost and expense prior to the closing under the Asset Contribution Agreement a policy of insurance to provide \$10,000,000 of coverage for those indemnification obligations for a period of five years. The cost of obtaining and maintaining the insurance policy in place for five years could be significant, and the insurance would be for the benefit of Geron and its affiliates.

We and Asterias have also agreed to indemnify Geron, from and against certain expenses, losses, and liabilities arising from, among other things, breaches of our or Asterias' representations, warranties and covenants under the Asset Contribution Agreement. The maximum damages that may be recovered by either party for a loss under this indemnification related to representations, warranties and covenants, with limited exceptions, is limited to \$2,000,000.

**Completing the asset contribution transaction may divert our management's attention away from ongoing operations and could adversely affect ongoing operations and business relationships.**

Completing the asset contribution transaction will require a significant amount of time and attention from our management. Moreover, after the closing of transaction, our management will be required to provide more management attention to Asterias. The diversion of our management's attention away from our other operations could adversely affect our operations and business relationships that do not relate to Asterias.

## 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 127,000,000 shares of capital stock consisting of 125,000,000 common shares and 2,000,000 “blank check” preferred shares. As of June 30, 2013, there were issued 57,932,220 common shares 4,394,634 common shares reserved for issuance upon the exercise of outstanding options under our employee stock option plans; and 1,751,615 shares reserved for issuance upon the exercise of common share purchase warrants. No preferred shares are presently outstanding.

We expect to issue a minimum of 8,902,077 common shares and a maximum of 11,463,464 common shares to Asterias under the Asset Contribution Agreement. We also expect to issue 8,000,000 common share purchase warrants to Asterias under the Asset Contribution Agreement.

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 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.

**The market price of our common shares could be impacted by the issuance of the common shares and warrants to Asterias and to an investor**

Under the Asset Contribution Agreement and subject to closing, we have agreed to issue to Asterias a minimum of 8,902,077 common shares, and a maximum of 11,463,464 common shares, and 8,000,000 common share purchase warrants. We have also issued 1,350,000 common shares and 649,998 warrants to an investor under a Stock and Warrant Purchase Agreement. Asterias and the investor may sell the common shares that they will receive from us. Those sales may take place from time to time on the NYSE MKT and may create downward pressure on the trading price of our common shares.

Asterias expects to distribute the warrants it receives from us to the future holders of its Series A common stock. The warrants we issue to Asterias will be exercisable for a period of five years at an exercise price of \$5.00 per share, subject to adjustment for certain stock splits, reverse stock splits, stock dividends, recapitalizations and other transactions. The warrants we issue to the investor will be exercisable for a period of three years at an exercise price of \$5.00 per share, subject to adjustment for certain stock splits, reverse stock splits, stock dividends, recapitalizations and other transactions. During the period that the warrants are outstanding, the actual or potential exercise of those warrants and sale of the underlying common shares may create downward pressure on the trading price of our common shares.



## **The market price of our common shares could be impacted by prices at which we sell shares in our subsidiaries**

The operation of some of our subsidiaries has been financed in part through the sale of capital stock in those subsidiaries, and our subsidiaries may sell shares of their capital stock in the future for financing purposes. The prices at which our subsidiaries may sell shares of their capital stock could impact the value of our company as a whole and could impact the price at which our common shares trade in the market. A sale of capital stock of any of our subsidiaries at a price that the market perceives as low could adversely impact the market price of our common shares. Even if our subsidiaries sell their capital stock at prices that reflect arm's length negotiation with investors, there is no assurance that those prices will reflect a true fair market value or that the ascribed value of the subsidiary based on those share prices will be fully reflected in the market value of our common shares.

### **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.**

Our Board of Directors has set \_\_\_\_\_, October \_\_, 2013, at \_\_\_\_ a.m. as the date of our next annual meeting of shareholders. Any shareholder who desires to submit a proposal for consideration and approval by the shareholders at the annual meeting and who wishes to have that proposal included in our proxy statement under SEC Rule 14a-8, must submit their proposal to us no later than \_\_\_\_\_, 2013. Any proposal received from a shareholder after that date will not be included in our proxy statement, and notice of the proposal will be considered untimely under SEC Rule 14a-5(e)(2).

**Item 6. Exhibits**

Exhibit Numbers	Description
2.1	Asset Contribution Agreement, dated January 4, 2013, by and among BioTime, Inc., BioTime Acquisition Corporation, and Geron Corporation. (1)
3.1	Articles of Incorporation with all amendments. *
3.2	By-Laws, As Amended. (3)
4.1	Warrant Agreement between BioTime, Inc. and Romulus Films, Ltd. (4)
4.2	Form of Warrant. (included in Exhibit 4.1)
4.3	Form of Warrant Issued June 2013. (5)
10.1	Indemnification Agreement, dated January 4, 2013, by and among BioTime, Inc., Broadwood Partners, L.P, and Neal Bradsher. (1)
10.2	Indemnification Agreement, dated January 4, 2013, by and among BioTime, Inc., Alfred D. Kingsley, Greenbelt Corp. and Greenway Partners, L.P. (1)
10.3	Stock and Warrant Purchase Agreement, dated January 4, 2013, between BioTime, Inc. and Romulus Films, Ltd. (4)
10.4	Stock and Warrant Purchase Agreement, dated January 4, 2013, between BioTime Acquisition Corporation and Romulus Films, Ltd. (4)
10.5	Business Park Lease, dated January 7, 2013, between David D. Bohannon Organization and BioTime, Inc. (4)
10.6	Stock Purchase Agreement, dated January 7, 2013, between David D. Bohannon Organization and BioTime, Inc. (4)
10.7	Amendment of Stock and Warrant Purchase Agreement, dated March 7, 2013, between BioTime, Inc. and Romulus Films, Ltd. (4)
10.8	Stock and Warrant Purchase Agreement, dated June 3, 2013, between BioTime, Inc. and certain investors. *
10.9	Option Agreement, dated June 3, 2013, between BioTime, Inc. and certain investors. *
10.10	Client Referral and Solicitation Agreement, dated April 1, 2013, between BioTime, Inc., LifeMap Sciences, Inc. and OBEX Securities, LLC. (5)
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 8-K filed with the Securities and Exchange Commission on January 8, 2013.
  - (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-K for the year ended December 31, 2012
  - (5) Incorporated by reference to BioTime's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 3, 2013.
- \* 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: August 9, 2013

/s/ Michael D. West

Michael D. West  
Chief Executive Officer

Date: August 9, 2013

/s/ Robert W. Peabody

Robert W. Peabody  
Chief Financial Officer

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[32](#) Section 1350 Certification.\*

101 Interactive Data File

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\* Filed herewith.

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**ENDORSED  
FILED**

in the office of the Secretary of State  
of the State of California

NOV 30 1990

**MARCH FONG EU, Secretary of State**

**ARTICLES OF INCORPORATION  
OF  
BIOTIME, INC**

I

The name of the corporation is BIOTIME, INC.

II

The purpose of this corporation is to engage in any lawful act or activity for which a corporation may be organized under the general Corporation Law of California other than the banking business, the trust company business or the practice of a profession permitted to be incorporated by the California Corporations Code.

III

**NUMBER OF DIRECTORS**

The authorized number of directors shall be no less than seven nor more than thirteen as set by resolution of the Board of Directors. The initial number of directors shall be seven.

IV

The name and address in this state of the corporation's initial agent for service of process is:

Ronald S. Barkin  
3050 Shattuck Avenue  
Berkeley, CA 97404

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V

This corporation is authorized to issue only one class of shares of stock which shall be designated common stock. The total number of shares it is authorized to issue is ten million (10,000,000).

VI

NO PREFERENCES, PRIVILEGES, RESTRICTIONS

No distinctions shall exist between the shares of the corporation of the holders thereof.

IN WITNESS WHEREOF, the undersigned, who are the incorporators of this corporation have executed these Articles of Incorporation on November 30, 1990.

/s/ Ronald S. Barkin  
RONALD S. BARKIN, Incorporator

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AMENDED ARTICLES OF INCORPORATION  
OF  
BIOTIME, INC.

Paul Segall and Judith Segall certify that:

1. They are the President and the Secretary, respectively, of BioTime, Inc., a California Corporation.
2. The Articles of Incorporation of this corporation are amended to read in full as follows:

"ONE: The name of this corporation is BioTime, Inc.

TWO: The purpose of the corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of California other than the banking business, the trust company business, or the practice of a profession permitted to be incorporated by the California Corporations Code.

THREE: The corporation is authorized to issue two classes of shares, which shall be designated "Common Shares" and "Preferred Shares". The number of Common Shares which the corporation is authorized to issue is 5,000,000 and the number of Preferred Shares which the corporation is authorized to issue is 1,000,000. 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, preferences, privileges, and restrictions granted to or imposed on the shares of 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. Upon the amendment of this article to read as herein set forth, each outstanding share of common stock is converted into or reconstituted as 0.1667 Common Share.

FOUR: The liability of the directors of the corporation for monetary damages shall be eliminated to the fullest extent permissible under California law. The corporation is authorized to indemnify "agents", as such term is defined in Section 317 of the California Corporations Code, to the fullest extent permissible under California law."

3. The foregoing amendment of articles of incorporation has been duly approved by the board of directors.

4. The foregoing amendment of articles of incorporation has been duly approved by the required vote of shareholders in accordance with Section 902 of the Corporations Code. The total number of outstanding shares of the corporation is 5,351,672. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50%.

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

Date: July 15, 1991

/s/ Paul Segall  
Paul Segall, President

/s/ Judith Segall  
Judith Segall, Secretary

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**ENDORSED  
FILED**

in the office of the Secretary of State  
of the State of California

JUL 20 1997

/s/ Bill Jones

**BILL JONES, Secretary of State**

CERTIFICATE OF AMENDMENT  
OF  
ARTICLES OF INCORPORATION

Paul E. Segall and Judith Segall certify that:

1. They are the President and Secretary, respectively, of BioTime, Inc., a California corporation.

2. The sentence of Article THREE of the Articles of Incorporation that now reads "The number of Common Shares which the Corporation is authorized to issue is 5,000,000 and the number of Preferred Shares which the Corporation is authorized to issue is 1,000,000" is amended to read as follows:

"The number of Common Shares which the Corporation is authorized to issue is 25,000,000 and the number of Preferred Shares which the Corporation is authorized to issue is 1,000,000."

3. The foregoing amendment of Articles of Incorporation has been duly approved by the board of directors.

4. The foregoing amendment of Articles of Incorporation has been duly approved by the required vote of shareholders in accordance with section 902 of the Corporations Code. The total number of outstanding Common Shares of the corporation is 3,203,193. There are no Preferred Shares outstanding. The number of Common Shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50%.

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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 Berkeley, California on June 20, 1997.

/s/ Paul Segall  
Paul E. Segall, President

/s/ Judith Segall  
Judith Segall, Secretary

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**ENDORSED - FILED**  
in the office of the Secretary of State  
of the State of California

JUL 18 1998

**BILL JONES, Secretary of State**

CERTIFICATE OF AMENDMENT  
OF  
ARTICLES OF INCORPORATION

Ronald S. Barkin and Judith Segall certify that:

1. They are the President and Secretary, respectively, of BioTime, Inc., a California corporation.

2. The sentence of Article THREE of the Articles of Incorporation that now reads "The number of Common Shares which the Corporation is authorized to issue is 25,000,000 and the number of Preferred Shares which the Corporation is authorized to issue is 1,000,000" is amended to read as follows:

"The number of Common Shares which the Corporation is authorized to issue is 40,000,000 and the number of Preferred Shares which the Corporation is authorized to issue is 1,000,000."

3. The foregoing amendment of Articles of Incorporation has been duly approved by the board of directors.

4. The foregoing amendment of Articles of Incorporation has been duly approved by the required vote of shareholders in accordance with section 902 of the Corporations Code. The total number of outstanding Common Shares of the corporation entitled to vote with respect to the amendment was 9,935,579. There are no Preferred Shares outstanding. The number of Common Shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50%.

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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 Berkeley, California on June 1, 1998.

/s/ Ronald S. Barkin  
Ronald S. Barkin, President

/s/ Judith Segall  
Judith Segall, Secretary

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JUL 27 2006

CERTIFICATE OF AMENDMENT  
OF  
ARTICLES OF INCORPORATION

Hal Sternberg and Judith Segall certify that:

1. They are the Vice-President and Secretary, respectively, of BioTime, Inc., a California corporation.
2. The second sentence of Article THREE of the Articles of Incorporation of the corporation is amended to read as follows:  
  
"The number of Common Shares which the corporation is authorized to issue is 50,000,000, and the number of Preferred Shares which the corporation is authorized to issue is 1,000,000."
3. The foregoing amendment of Articles of Incorporation has been duly approved by the board of directors.
4. The foregoing amendment of Articles of Incorporation has been duly approved by the required vote of shareholders in accordance with section 902 of the Corporations Code. The total number of outstanding shares of the corporation entitled to vote with respect to the amendment was 22,574,374. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50%.

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 Emeryville, California on July 25, 2006.

/s/ Hal Sternberg  
Hal Sternberg, Vice President

/s/ Judith Segall  
Judith Segall, Secretary

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OCT 19 2009

CERTIFICATE OF AMENDMENT  
OF  
ARTICLES OF INCORPORATION

Michael D. West and Judith Segall certify that:

1. They are the President and Secretary, respectively, of BioTime, Inc., a California corporation.
2. Article THREE of the Articles of Incorporation of the corporation is amended to read as follows:

THREE: The corporation is authorized to issue two classes of shares, which shall be designated "Common Shares" and "Preferred Shares". The number of Common Shares which the corporation is authorized to issue is 75,000,000, and the number of Preferred Shares which the corporation is authorized to issue is 1,000,000. The Preferred Shares may be issued in one or more series as the board of directors may by resolution designate. The board of directors is authorized to fix the number of shares of any series of Preferred Shares and to determine or alter the rights, preferences, privileges, and restrictions granted to or imposed upon the Preferred Shares as a class, or upon any wholly unissued series of 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.

3. The foregoing amendment of Articles of Incorporation has been duly approved by the board of directors.

4. The foregoing amendment of Articles of Incorporation has been duly approved by the required vote of shareholders in accordance with section 902 of the Corporations Code. The total number of outstanding Common Shares of the corporation entitled to vote with respect to the amendment was 32,614,563. The number of Common Shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50%. There are no Preferred Shares of the corporation issued and outstanding.

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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 October 16, 2009.

/s/ Michael D. West  
Michael D. West, President

/s/ Judith Segall  
Judith Segall, Secretary

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May 22, 2013

CERTIFICATE OF AMENDMENT  
OF  
ARTICLES OF INCORPORATION

Michael D. West and Judith Segall certify that:

1. They are the President and Secretary, respectively, of BioTime, Inc., a California corporation.
2. Article THREE of the Articles of Incorporation of the corporation is amended to read as follows:

THREE: The corporation is authorized to issue two classes of shares, which shall be designated "Common Shares" and "Preferred Shares". The number of Common Shares which the corporation is authorized to issue is 125,000,000, and the number of Preferred Shares which the corporation is authorized to issue is 2,000,000. The Preferred Shares may be issued in one or more series as the board of directors may by resolution designate. The board of directors is authorized to fix the number of shares of any series of Preferred Shares and to determine or alter the rights, preferences, privileges, and restrictions granted to or imposed upon the Preferred Shares as a class, or upon any wholly unissued series of 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.

3. The foregoing amendment of Articles of Incorporation has been duly approved by the board of directors.

4. The foregoing amendment of Articles of Incorporation has been duly approved by the required vote of shareholders in accordance with section 902 of the Corporations Code. The total number of outstanding Common Shares of the corporation entitled to vote with respect to the amendment was 53,361,825. The number of Common Shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50% of the outstanding Common Shares entitled to vote. There are no Preferred Shares of the corporation issued and outstanding.

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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 21, 2013.

/s/ Michael D. West  
Michael D. West, President

/s/ Judith Segall  
Judith Segall, Secretary

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**STOCK AND WARRANT PURCHASE AGREEMENT**

THIS STOCK AND WARRANT PURCHASE AGREEMENT (this "Agreement") is entered into as of June 3, 2013 (the "Effective Date") by and between BioTime, Inc., a California corporation (the "Company") and each of the undersigned identified on the signature page attached hereto (each such undersigned, individually and/or collectively, as applicable, a "Purchaser").

**ARTICLE 1.****PURCHASE AND SALE OF SHARES AND WARRANTS**

**1.1 Sale of Shares.** Each Purchaser hereby irrevocable agrees to purchase from the Company, and the Company agrees to sell to each Purchaser pursuant to the Registration Statement (as defined below) the number of Units shown beneath such Purchaser's signature on the signature page of this Agreement, at the price of \$4.155 per Unit (the "Purchase Price"). Each Unit consists of one common share, no par value ("Share"), of the Company and 0.25 of a Common Share Purchase Warrant ("Warrant"). Each whole Warrant will entitle the holder to purchase, on the terms and conditions set forth in the Warrant Certificate governing the Warrants, one common share, no par value of the Company ("Warrant Share") for \$5.00 per Warrant Share (the "Warrant Price"), subject to adjustment as provided in the Warrant Certificate a copy of which is attached as Exhibit A (the "Warrant Certificate"). No fractional Units shall be sold and no fractional Shares or fractional Warrants shall be issued. If the sale of Units to a Purchaser would result in the issuance of a fractional Warrant, the fractional portion of the Warrant shall be disregarded and there shall be no reduction in the purchase price of the Units or cash payment in lieu of the disregarded fractional Warrant. The number of whole Warrants shall be determined based on the total number of Units to be sold to a Purchaser at a Closing (as defined below) so that fractional Warrants will be aggregated to minimize or, if possible, eliminate potential fractional Warrants so that in the aggregate such Purchaser receives only whole Warrants. Upon issue and sale, the Shares and Warrants may be sold or transferred separate from each other and will be "paired" as part of a Unit.

**ARTICLE 2.****REPRESENTATIONS AND WARRANTIES OF THE COMPANY**

The Company represents and warrants to each Purchaser that except as set forth in the most current prospectus (the "Prospectus") included in Registration Statement on Form S-3 (File No. 333-183557) (the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act") registering the offer and sale of the Shares and Warrants, and in a prospectus supplement filed in accordance with Rule 424(b) under the Securities Act describing the offer of the Shares and Warrant (the "Prospectus Supplement"), including all documents and information incorporated by reference therein:

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**2.1 Organization.** The Company is a corporation duly organized, validly existing and in good standing under the laws of the state of California. The Company is duly qualified to do business in the state of California and in each other state in which it is doing business and where the failure to so qualify could have a material adverse effect on its business, operations, or properties, or could subject the Company to fines or penalties that are material to the Company's financial condition.

**2.2 Authority; Enforceability.** The Company has the power and authority to execute and deliver this Agreement and to perform all of its obligations hereunder. This Agreement has been duly authorized, executed and delivered by the Company and is the valid and binding agreement of the Company, enforceable in accordance with its terms subject to: (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors; and (ii) general principles of equity. When executed and delivered at Closing (as defined in Section 4.1), the Warrant Certificate will be duly authorized and executed by the Company and will be the valid and binding agreement of the Company enforceable in accordance with its terms subject to: (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors; and (ii) general principles of equity.

**2.3 Valid Issuance of Shares and Warrant Shares.** The Shares that are being purchased by such Purchaser hereunder, when issued, sold and delivered in accordance with the terms of this Agreement, including payment of the Purchase Price, will be duly and validly issued, fully paid, and nonassessable. The Warrant Shares issuable upon exercise of the Warrants have been duly and validly authorized for issuance and, upon issuance in accordance with the terms of the Warrants, including the payment in full of the exercise price pursuant to the terms and conditions of the Warrant Certificate, will be duly and validly issued, fully paid, and nonassessable.

**2.4 Capitalization.** The Company is authorized to issue the following shares of capital stock: 125,000,000 common shares, no par value, of which 55,734,781 shares were issued and outstanding as of May 28, 2013, and 2,000,000 preferred shares, no par value, none of which are issued or outstanding. Except for the outstanding common shares of the Company, the Shares and Warrants issuable pursuant to this Agreement, the additional common shares that may be issued and sold to other purchasers pursuant to the Prospectus Supplement, the common shares that may be issued upon the exercise of warrants (having the same terms as the Warrants) that may be issued and sold to other purchasers pursuant to the Prospectus Supplement, 4,588,800 common shares issuable upon exercise of outstanding options, 1,206,611 common shares of issuable upon exercise of outstanding warrants, 2,716,667 shares reserved for issuance under the Company's 2012 Equity Incentive Plan, up to 11,463,464 common shares issuable to pursuant to an Asset Contribution Agreement among the Company, the Company's subsidiary Asterias Biotherapeutics, Inc. ("Asterias"), and Geron Corporation ("Geron"), and 8,000,000 common shares reserved for issuance upon the exercise of certain warrants issuable to Asterias pursuant to the Asset Contribution Agreement, there are no issued or outstanding shares or other equity securities of the Company (or shares or other equity securities of the Company reserved for issuance), and there are no securities of the Company convertible into or exchangeable for stock or other equity securities of the Company, or other subscriptions, options, warrants, conversion rights, stock appreciation rights, "phantom" stock, stock units, calls, claims, rights of first refusal, rights (including preemptive rights), commitments, arrangements or agreements to which the Company is a party or by which it is bound in any case obligating the Company to issue, deliver, sell, purchase, redeem, acquire or vote, or cause to be issued, delivered, sold, purchased, redeemed, acquired or voted, stock or other equity securities of the Company, or obligating the Company to grant, extend or enter into any subscription, option, warrant, conversion right, stock appreciation right, call, right, commitment, arrangement or agreement to issue, deliver, sell, purchase, redeem, acquire or vote stock or equity securities of the Company. All outstanding common shares of the Company are, and all shares reserved for issuance will be, upon issuance in accordance with the terms specified in the instruments or agreements pursuant to which they are issuable, duly authorized, validly issued, fully paid and nonassessable and not subject to or issued in violation of, any preemptive right, purchase option, call option, right of first refusal, subscription or any other similar right.

**2.5 Disclosure Documents; Financial Statements.** The Company 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 (the foregoing materials being collectively referred to herein as the SEC Reports), during the twelve (12) months prior to the date hereof. 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 the Company included in the SEC Reports (i) have been prepared in accordance with United States generally accepted accounting principles ("GAAP") applied on a consistent basis during the periods involved, except as may be otherwise specified in such financial statements or the notes thereto, or, in the case of unaudited statements, as permitted by Form 10-Q, and except that the unaudited financial statements may not contain footnotes and are subject to normal and recurring year-end adjustments that will not, individually or in the aggregate, be material in amount; and (ii) fairly present in all material respects the consolidated financial position of the Company and its subsidiaries on a consolidated basis as of the respective dates thereof and the consolidated results of operations and cash flows of the Company and its subsidiaries for the periods covered thereby.

**2.6 Absence of Certain Changes.** Since December 31, 2012, except as specifically disclosed in SEC Reports, (i) there has not been any material adverse change in the financial condition, assets, liabilities, revenues, or business of the Company and its subsidiaries, taken as a whole, (ii) the Company 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, (B) liabilities not required to be reflected in the Company's financial statements pursuant to GAAP or not required to be disclosed in filings made with the Securities and Exchange Commission ("SEC"), and (C) liabilities arising under this Agreement and the Warrant Certificate, (iii) the Company has not altered its method of accounting or the identity of its auditors, and (iv) the Company 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.

**2.7 Internal Controls.** The Company maintains a process of “internal controls over financial reporting” (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that is designed to provide reasonable assurances: (i) that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles; (ii) that receipts and expenditures are being made only in accordance with the authorizations of management and directors; and (iii) regarding prevention or timely detection of the unauthorized acquisition, use or disposition of the assets of the Company and its subsidiaries that could have a material effect on the financial statements. The Company maintains a system of “disclosure controls and procedures” (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) that is designed to provide reasonable assurances that all material information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company’s management, as appropriate, to allow timely decisions regarding required disclosure, and otherwise to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and regulations of the SEC.

**2.8 Registration Statement.**

(a) The Company has prepared and filed the Registration Statement in conformity with the requirements of the Securities Act. The Registration Statement is effective under the Securities Act and no stop order preventing or suspending the effectiveness of the Registration Statement or suspending or preventing the use of the Prospectus or the Prospectus Supplement has been issued by the SEC and no proceedings for that purpose have been instituted or, to the knowledge of the Company, are threatened by the SEC. The Company shall file a final Prospectus Supplement with the SEC pursuant to Rule 424(b) no later than two (2) business days after the date hereof. The Registration Statement, and the Prospectus together with the Prospectus Supplement, at time the Prospectus and the Prospectus Supplement were issued conformed, and on the Closing Date will conform, in all material respects to the requirements of the Securities Act and do not and on the Closing Date will not contain an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements contained therein, in light of the circumstances under which they were made, not misleading.

(b) When issued pursuant to this Agreement and the Registration Statement at Closing, the Shares and the Warrants will be free of restrictions on transfer under the Securities Act, other than such restrictions as may be applicable under Rule 144 under the Securities Act with respect to sales or transfers of securities by an affiliate (as defined in Rule 144) of the issuer should such Purchaser be or become an affiliate of the Company.

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

**2.10 Taxes.** Since January 1, 2010, the Company 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 the Company, or where the Company owns any property, and any taxes due, as reflected on such tax returns, have been paid.

**2.11 Subsidiaries.** The Company's subsidiaries and its percentage ownership thereof is as shown in its Quarterly Report on Form 10-Q for the three months ended March 31, 2013.

**2.12 No Conflict.** The Company is not in violation or default of any provision of its Articles of Incorporation or bylaws, and is not in violation or default in any material respect of any instrument, judgment, order, writ, decree or contract to which it is a party or by which it is bound, or, to its knowledge, of any provision of any federal or state statute, rule or regulation applicable to it. The execution and delivery of this Agreement and consummation of the sale of the Shares and Warrants contemplated by this Agreement, and the issuance of the Warrant Shares upon the exercise of the Warrants in accordance with the terms and conditions of the Warrant Certificate (a) do not and will not violate any provisions of (i) any rule, regulation, statute, or law, (ii) the terms of any order, writ or decree of any court or judicial or regulatory authority or body, (iii) the Articles of Incorporation or bylaws of the Company, or (iv) the rules and regulations of the NYSE MKT applicable to the listing of the Company's common shares, (b) will not conflict with or result in a breach of any condition or provision or constitute a default under or pursuant to the terms of any Material Contract (as defined below), and (c) will not result in the creation or imposition of any lien, charge or encumbrance upon any of the Shares or Warrant Shares or upon any of the assets or properties of the Company. The term Material Contract means any contract, agreement, license, lease, deed of trust, mortgage, lien, debenture, promissory note, or instrument to which the Company is a party (i) the termination of or default under which could have a material adverse affect on the business, financial condition, assets or prospects of the Company, or (ii) that constitutes a lien or security interest on any real or personal property of the Company the loss of which through a foreclosure sale would have a material adverse affect on the business, financial condition, assets or prospects of the Company.



**2.13 Litigation.** There is no lawsuit, arbitration proceeding, or administrative action or proceeding pending or threatened against the Company which (a) questions the validity of this Agreement or the Warrant Certificate or any action taken or to be taken by the Company in connection with this Agreement or the issue and sale of the Shares and Warrants hereunder, (b) alleges any infringement of any trademark, service mark, or patent by the Company, or (c) if adversely decided would have a material adverse affect upon the business, financial condition, assets or prospects of the Company.

**2.14 Patents and Trademarks.** The Company is the sole and exclusive owner of or has a valid license to use all patents, trademarks, service marks, trade names, copyrights, trade secrets, information, proprietary rights and processes presently used by the Company in its business as now conducted, without any conflict with or, to the Company's knowledge infringement of the rights of others. The Company has not received any communications alleging that it has violated or, by conducting its business as presently conducted, violates any of the patents, trademarks, service marks, trade names, copyrights or trade secrets or other proprietary rights of any other person or entity.

**2.15 Title to Property.** The Company has good and marketable title to its property and assets free and clear of all mortgages, liens, loans and encumbrances. Title all of the personal and real property used by the Company is held in the name of the Company or a subsidiary or is licensed or leased from a third party. With respect to the property leased or licensed from a third party, the Company is in compliance with such leases and licenses in all material respects and, to Company's knowledge, the Company holds a valid leasehold or license. All facilities, machinery, equipment, fixtures, vehicles and other properties owned, leased or used by the Company are in good operating condition and repair (subject to ordinary wear and tear) and are reasonably fit and usable for the purposes for which they are being used.

**2.16 Regulatory Permits.** The Company possess all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities necessary to conduct its businesses as described in the SEC Reports ("Permits"), except where the failure to possess such Permits would not result in a Material Adverse Effect, and the Company has not received any notice of proceedings relating to the revocation or modification of any Permit, the revocation or proposed modification of which would result in a Material Adverse Effect.

**2.17 Transactions With Affiliates.** Except as set forth in the SEC Reports, none of the executive officers or directors of the Company is presently a party to any transaction with the Company, including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, providing for the borrowing of money from or lending of money to or otherwise requiring payments to or from any executive officer or director or, to the knowledge of the Company, any entity in which any executive officer or director has a substantial interest or is an officer, director, trustee, stockholder, member or partner, in each case in excess of \$120,000, other than for (i) payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company, and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company or any of its subsidiaries.

**2.18 Employee Benefit Plans.** Other than the Company's Equity Incentive Plan and stock option and similar equity incentive plans maintained by Company subsidiaries, the Company does not have and has never maintained or sponsored any Employee Benefit Plan as defined in the Employee Retirement Income Security Act of 1974, as amended.

**2.19 Labor Agreements and Actions; Employee Compensation.** The Company is not bound by or subject to (and none of its assets or properties is bound by or subject to) any written or oral contract, commitment or arrangement with any labor union, and no labor union has requested or, to the Company's knowledge, has sought to represent any of the employees, representatives or agents of the Company. There is no strike or other labor dispute involving the Company pending, nor to the Company's knowledge, threatened, that could have a material adverse effect on the assets, properties, financial condition, operating results or business of the Company, nor is the Company aware of any labor organization activity involving its employees. The Company is not aware that any officer or key employee, or that any group of key employees, intends to terminate their employment the Company, nor does the Company have a present intention to terminate the employment of any of the foregoing. The employment of each officer and employee of the Company is terminable at the will of the Company. To its knowledge, the Company has complied in all material respects with all applicable state and federal equal employment opportunity and other laws related to employment.

**2.20 No Integrated Offering.** Neither the Company, nor any of its Affiliates, nor any person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause the offering of the Shares and Warrants to be integrated with prior offerings by the Company for purposes of any applicable shareholder approval provisions of the NYSE MKT. As used in this Agreement, "Affiliate" means any Person controlled by, in control of, or under common control with another Person. "Person" includes any natural person, and any corporation, partnership, limited liability company, trust, or other entity.

**2.21 Non-Public Information.** Except with respect to the material terms and conditions of this Agreement, the Warrants, and those certain Option Agreements dated as of the date hereof by and between the Company and each of the Purchasers (the "Option Agreements" and collectively with this Agreement and the Warrants, the "Transaction Documents") which will publicly be disclosed in the 8-K Filing (as defined in Section 5.4), the Company confirms that neither it nor any other Person acting on its behalf has provided any of the Purchasers (other than any Purchaser that is an officer or director of the Company or an Affiliate of any officer or director of the Company) or their agents or counsel with any information about the Company or any of its subsidiaries, including, without limitation, LifeMap Sciences, Inc. ("LifeMap"), that the Company believes constitutes material, non-public information about the Company, and which is not otherwise disclosed in the Prospectus Supplement. The Company understands and confirms that the applicable Purchasers will rely on the foregoing representation in effecting transactions in securities of the Company.

**2.22 Anti-Dilution Provisions.** The sale of the Shares and Warrants pursuant to this Agreement will not result in (a) an increase in the number of shares of any class of capital stock the Company issuable upon the exercise of any option, warrant or similar right to acquire capital stock of the Company, or upon conversion of any debt instrument or other security convertible into capital stock of the Company, or (b) a reduction in the purchase, exercise, or conversion price or an adjustment of the conversion ratio of any security of the Company.

**2.23 Shell Company.** The Company is not a company described in paragraph (i)(1) of SEC Rule 144.

**ARTICLE 3.  
REPRESENTATIONS AND WARRANTIES OF PURCHASERS**

Each Purchaser, severally and not jointly and severally, hereby represents and warrants with respect to only itself to the Company the following:

**3.1 Organization.** Such Purchaser, if not a natural person, is a corporation, limited liability company, partnership, trust or other entity duly organized, validly existing and in good standing under the laws of the state of in which it is incorporated or otherwise organized.

**3.2 Authority; Enforceability.** Such Purchaser has the power and authority to execute and deliver this Agreement and to perform all of its obligations under this Agreement. This Agreement has been duly authorized and executed by such Purchaser and is the valid and binding agreement of such Purchaser enforceable in accordance with its terms, except (i) to the extent limited by any bankruptcy, insolvency, or similar law affecting the rights of creditors generally, and (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

**3.3 No Conflict.** The execution and delivery of this Agreement, and consummation of the transactions contemplated hereunder, including the purchase of the Shares and Warrants, by such Purchaser do not and will not violate any provisions of (i) any rule, regulation, statute, or law applicable to such Purchaser or (ii) the terms of any order, writ, or decree of any court or judicial or regulatory authority or body by which such Purchaser is bound, or (iii) the articles of incorporation, bylaws, or similar charter or governing documents of such Purchaser.

**3.4 Certain Transactions and Confidentiality.** Other than purchasing the Shares and Warrants pursuant to this Agreement such Purchaser has not, nor has any person or entity acting on behalf of or pursuant to any understanding, agreement, or arrangement with such Purchaser, directly or indirectly executed any purchases or sales, including any "short sale" as defined in SEC Rule SHO, of the common shares of the Company since May 1, 2013. Such Purchaser has maintained the confidentiality of all disclosures made to it in connection with this Agreement and the offer of the Shares and Warrants (including the existence and terms of this transaction), other than disclosures contained in the Company's SEC Reports or Company press releases, and disclosures made to officers, directors, attorneys, employees, and advisors of such Purchaser who had a need to know in connection with such Purchaser's decision to enter into this Agreement, and who have been advised of the confidential nature of such information and of the obligation to maintain the confidentiality thereof.

**3.5 Place of Business or Residence.** Such Purchaser represents and warrants that such Purchaser has such Purchaser's principal place of business or residence as set forth on the signature page of this Agreement.

#### **ARTICLE 4. CLOSING**

**4.1 Time and Place of Closing.** The consummation of the purchase and sale of the Shares (**Closing**) shall take place in on the third Business Day after the execution and delivery of this Agreement by Purchasers and the Company. The date on which a Closing occurs is referred to in this Agreement as a **Closing Date**. On the Closing Date, each Purchaser shall pay in full the Purchase Price for the Units purchased by wire transfer of the Purchase Price for the Units being purchase by such Purchaser, in immediately available funds, to an account designated by the Company. The Purchase Price shall be paid in United States Dollars. On the Closing Date, the Company shall issue to each Purchaser the Shares and Warrants purchased, against payment of the Purchase Price. Closing shall occur at the principal office of the Company or at such other place as the parties may agree. A "Business Day" shall be any day on which the banks in New York are not required or permitted to close.

**4.2 Documents to be Delivered By the Company.** The Company shall deliver the following documents to each Purchaser at the Closing:

(a) A copy of the most current prospectus (the "Prospectus") included in Registration Statement on Form S-3 (File No. 333-183557) under the Securities Act registering the offer and sale of the Shares and Warrants (the "Registration Statement"), and a prospectus supplement filed in accordance with Rule 424(b) under the Securities Act describing the offer of the Shares and Warrants; provided that the Prospectus and Prospectus Supplement may be delivered in accordance with Rule 172 under the Securities Act);

(b) *Shares.* The Shares purchased by such Purchaser, registered in the name of such Purchaser delivered electronically via The Depository Trust Company Deposit / Withdrawal at Custodian system ("DWAC");

(c) *Warrants.* A copy of the Warrant Certificate, duly executed by the Company, evidencing the number of Warrants purchased by such Purchaser; provided, however, that delivery of the Warrant Certificate shall be deemed made on the Closing Date if an executed copy thereof is delivered to such Purchaser in .pdf format by e-mail and the Warrant Certificate is deposited with Federal Express on the Closing Date for next Business Day delivery to such Purchaser at the address shown in on the signature page of this Agreement;

(d) *Opinion.* The opinion of Thompson, Welch, Soroko & Gilbert LLP, the Company's outside counsel, dated as of the Closing Date, in substantially the form of Exhibit B attached hereto.

**4.3 Conditions of the Company's Obligation to Close.** The obligation of the Company to sell the Shares to each Purchaser on each Closing Date is conditioned upon the following:

(a) *Payment and Delivery.* The Company's receipt of the Purchase Price for the Units being sold to such Purchaser;

(b) *Representations and Warranties.* The representations and warranties made by such Purchaser in ARTICLE 3 of this Agreement shall be true and correct in all material respects when made and on the Closing Date; provided, that any representation and warranty that is itself qualified by a materiality standard shall be true and correct in all respects; and

(c) *Performance of Covenants.* Such Purchaser shall have fully performed all covenants and agreements required to be performed by such Purchaser on or before the Closing Date.

**4.4 Conditions of each Purchaser's Obligation to Close.** The obligation of each Purchaser to purchase the Shares and Warrants from the Company on any Closing Date is conditioned upon the following:

(a) *Delivery.* Such Purchaser's receipt of the items required to be delivered by the Company under Section 4.2.

(b) *Representations and Warranties.* The representations and warranties made by the Company in ARTICLE 2 of this Agreement shall be true and correct in all material respects when made and on the applicable Closing Date, unless made as of a specific date in which case they shall be accurate as of such date, and such Purchaser shall have received from the Company a certificate, dated as of the Closing Date, to such effect signed by the Chief Executive Officer of the Company; provided, that any representation and warranty that is itself qualified by a materiality standard shall be true and correct in all respects.

(c) *Performance.* The Company shall have performed and complied with all agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before the applicable Closing Date.

(d) *Bankruptcy; Insolvency.* The Company shall not be subject to (i) any order for relief, or subject to any pending proceeding for reorganization or liquidation, under the United States Bankruptcy Code, as amended, or under any other law pertaining to insolvency of the Company or creditor's rights generally, (ii) any appointment of a receiver for the Company or any of its assets, or (iii) any plan or action of dissolution or liquidation of the Company or its business.

(e) *No Material Adverse Event.* No Material Adverse Event shall have occurred since March 31, 2013.

(f) *Listing.* The Common Stock shall be designated for quotation or listed on the NYSE MKT and the NYSE MKT shall not have suspended the listing or trading of the Company's common shares on the NYSE MKT nor shall suspension by the SEC or the NYSE MKT have been threatened, as of the Closing Date, either (A) in writing by the SEC or the NYSE MKT or (B) by falling below the minimum listing maintenance requirements of the NYSE MKT.

(g) *Option Agreements.* The Company shall have executed and delivered to such Purchaser the Option Agreement in the form of Exhibit C granting such Purchaser the option to purchase from the Company a number of shares of LifeMap common stock equal to the number of Warrants purchased by such Purchaser pursuant to this Agreement, such number of shares of common stock of LifeMap subject to adjustment pursuant to such Option Agreement.

## ARTICLE 5. ADDITIONAL COVENANTS

**5.1 Further Assurances.** Each party will execute, acknowledge, and deliver such additional certificates and documents and will take such additional actions as the other party may reasonably request on or after a Closing Date to effect, complete or perfect the issue and sale of the Shares to each Purchaser.

**5.2 Application of Proceeds.** The Company shall apply the proceeds from the sale of the Units substantially in the manner described in the Prospectus Supplement.

**5.3 Purchasers' Market Activity.** Each Purchaser agrees that such Purchaser shall not, prior to the public announcement by the Company that it has entered into this Agreement, engage in any stabilization activity in connection with the Company's common shares, or otherwise bid for or engage in any purchase or sale, including any Short Sale, of the Company's common shares, directly or through or in arrangement with and any entity in control of, controlled by, or under common control with such Purchaser. Each Purchaser agrees to furnish or cause to be furnished to each broker through whom such Purchaser's Shares or Warrants may be offered for sale the number of copies of the Prospectus and Prospectus Supplement required by the broker; provided that the Prospectus and Prospectus Supplement may be delivered in accordance with Rule 172 under the Securities Act. Each Purchaser covenants and agrees that until such time as the transactions contemplated by this Agreement are publicly disclosed by the Company pursuant to a press release, such Purchaser will maintain the confidentiality of the existence and terms of this Agreement.

**5.4 Public Disclosure by the Company.** On or before 9:30 a.m., New York City time, on the first Business Day following the execution of this Agreement, the Company shall issue a press release and file a Current Report on Form 8-K describing the terms of the transactions contemplated by this Agreement, the Warrant Certificate and the Option Agreements in the form required by the Exchange Act and attaching the material Transaction Documents (including, without limitation, this Agreement and the form of Warrant Certificate and the Option Agreement) as exhibits to such filing (including all attachments, the "8-K Filing"). As promptly as practicable, the Company will provide any Purchaser purchasing, together with any of its Affiliates, Units for a Purchase Price in excess of \$5,000,000 (a "Qualified Purchaser") with a draft of the 8-K Filing. The Company will consider any reasonable comments the Qualified Purchasers timely provide to the Company on such draft prior to publicly filing it. The Company represents to the Purchasers that from and after the 8-K Filing, it shall have publicly disclosed all material, non-public information delivered to any of the Purchasers by the Company, or by any of the Company's subsidiaries, or by any of the officers, directors, employees, or agents of the Company or of any of its subsidiaries, in connection with the transactions contemplated by the Transaction Documents. The Company shall not, and shall cause each of its subsidiaries and its and each of their respective officers, directors, employees and agents, not to, provide any Purchaser with any material, nonpublic information regarding the Company or any of its subsidiaries, including, without limitation, LifeMap Sciences, Inc. from and after the filing of the 8-K Filing with the SEC without the express written consent of such Purchaser; provided that this restriction shall not apply to any Purchaser that is an officer or director of the Company or an Affiliate of any officer or director of the Company. To the extent that the Company delivers any such material, non-public information to a Purchaser without such Purchaser's consent, the Company hereby covenants and agrees that such Purchaser shall not have any duty of confidentiality with respect to, or a duty to the Company not to trade on the basis of, such material, non-public information. Subject to the foregoing, neither the Company, its subsidiaries nor any Purchaser shall issue any press release or any other public statement with respect to the transactions contemplated hereby that names any Purchaser, unless such disclosure is required by law, regulation or any exchange or securities market or quotation system on which the Company's securities are then listed or quoted.

**5.5 Publicity.** No Purchaser shall issue any press release or make any similar public statement or communication disclosing the terms of this Agreement or the transactions hereunder without the prior written consent of the Company, provided that the Company's consent shall not unreasonably be withheld or delayed if such disclosure is required by law and such Purchaser shall have provided the Company with a copy of the proposed press release or other public statement or communication a reasonable time prior to the public release or dissemination thereof.

**ARTICLE 6.**  
**MISCELLANEOUS**

**6.1 Governing Law.** This Agreement shall be construed and governed in all respects 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. All disputes and controversies arising out of or in connection with this Agreement shall be resolved non-exclusively by the state and federal courts located in the State of New York and the State of California, and each party agrees to submit to the jurisdiction of said courts.

**6.2 Successors and Assigns.** The parties may not assign their rights or obligations under this Agreement, directly or by operation of law, without the consent of the other party. The provisions of this Agreement shall inure to the benefit of, and be binding upon, the respective successors, assigns, heirs, executors and administrators of each Purchaser and the Company.

**6.3 Entire Agreement; Amendment.** The Transaction Documents constitute the full and entire understanding and agreement among the parties with regard to the subject matter of the Transaction Documents. This Agreement and any term of this Agreement may be amended, waived, discharged or terminated only by a written instrument signed by the parties.

**6.4 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 (a) four (4) days after being deposited in the United States mail, certified postage prepaid, return receipt requested, or (b) when delivered by hand, by messenger or next Business Day air freight service, or (c) on the date of facsimile transmission (FAX) or electronic mail (email) if sent at or prior to 5:30 p.m. (New York City time) on a Business Day, or the next Business Day after the date of facsimile or email transmission, if sent on a day that is not a Business Day or later than 5:30 p.m. (New York City time) on a Business Day, in any case addressed as follows:

To any Purchaser:	At the address or FAX number or email address of such Purchaser shown on the signature page of this Agreement
To the Company:	BioTime Inc. 1301 Harbor Bay Parkway Alameda, California 94502 Attention: Chief Financial Officer FAX: (510) 521- 3389 Email: rpeabody@biotimemail.com

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



**6.5 Expenses.** The Company shall reimburse Empery Asset Master Ltd. (a Purchaser) or its designee(s) (in addition to any other expense amounts paid to any Purchaser or its counsel prior to the date of this Agreement) for all costs and expenses incurred in connection with the transactions contemplated by the Transaction Documents (including all legal fees and disbursements in connection therewith, documentation and implementation of the transactions contemplated by the Transaction Documents and due diligence in connection therewith), which amount may be withheld by such Purchaser from its Purchase Price at the Closing. Notwithstanding the foregoing, in no event will the costs and expenses of Empery Asset Master Ltd. reimbursed by the Company pursuant to this Section 6.5 exceed \$15,000. Other than as set forth herein, each Purchaser and the Company shall bear their own expenses, including fees and expenses of their own advisers, counsel, accountants and other experts, if any, and all other expenses incurred by the party incident to the negotiation, preparation, execution, delivery and performance of this Agreement. The Company shall pay all Transfer Agent fees, stamp taxes and other taxes and duties levied in connection with the delivery of the Shares and Warrants to each Purchaser.

**6.6 Brokers.** No Purchaser shall have any liability to any broker, finder, investment banker, or other advisor (**Company Agent**) retained or engaged by the Company or any subsidiary of the Company in connection with the transactions contemplated by this Agreement.

**6.7 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.

**6.8 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, and the balance of this Agreement as so interpreted shall be enforceable in accordance with its terms.

**6.9 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 or by email delivery of a pdf format data file, and no party shall deny the validity of a signature or this Agreement signed and so transmitted on the basis that a signed document is represented by a copy or facsimile or pdf format data file and not an original.

**6.10 Termination.** This Agreement may be terminated by any Purchaser with respect to itself, by written notice to the Company, or by the Company with respect to all Purchasers, by written notice to all Purchasers, in either case if the Closing has not been consummated on or before the third Business Day after the Effective Date other than due to a breach of this Agreement or any covenant or agreement hereunder by the party seeking to so terminate this Agreement. Termination of this Agreement will not affect the right of any party not in breach of its covenants and agreements under this Agreement to sue for any breach of this Agreement by the other party.

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

**COMPANY:**

BioTime, Inc.

By: Robert W. Peabody

Title: Sr. VP, COO, and CFO

**PURCHASER:**

Empery Asset Master, Ltd

By: Empery Asset Management, LP, its authorized agent

By: Empery AM GP, LLC

By: /s/Ryan Lane

Title: Managing Member

Address: 1 Rockefeller Plaza, Suite 1205

New York, NY 10020

FAX Number: 212-608-3307

Email: notices@emperyam.com

Number of Units Purchased: 289,000

Aggregate Purchase Price: \$1,200,795

**COMPANY:**

BioTime, Inc.

By: Robert W. Peabody

Title: Sr. VP, COO, and CFO

**PURCHASER:**

Hartz Capital Investments, LLC

By: Empery Asset Management, LP, its authorized agent

By: Empery AM GP, LLC

By: /s/Ryan Lane

Title: Managing Member

Address: 1 Rockefeller Plaza, Suite 1205

New York, NY 10020

FAX Number: 212-608-3307

Email: notices@emperyam.com

Number of Units Purchased: 1,155,000

Aggregate Purchase Price: \$4,799,025

**COMPANY:**

BioTime, Inc.

By: Robert W. Peabody

Title: Sr. VP, COO, and CFO

**PURCHASER:**

Delaware Street Capital Master Fund, L.P

By: /s/Rashant Gupta

Title: Chief Financial Officer

Address: 900 North Michigan Ave.,

Suite 920

Chicago, IL 60611

FAX Number: 312-915-2487

Email: GUPTA@DSCLLC.COM

Number of Units Purchased: 120,340

Aggregate Purchase Price: \$500,012.70

**COMPANY:**

BioTime, Inc.

By: Robert W. Peabody

Title: Sr. VP, COO, and CFO

**PURCHASER:**

By: /s/Phylis M. Esposito

Title: Individual

Address: 434 E 52nd Street

Penthouse "E"

New York, NY 10020

FAX Number: 212-969-9013

Email: espopme@yahoo.com

Number of Units Purchased: 125,000

Aggregate Purchase Price: \$519,375

**COMPANY:**

BioTime, Inc.

By: Robert W. Peabody

Title: Sr. VP, COO, and CFO

**PURCHASER:**

By: /s/Anthony Low-Beer

Title: Individual

Address: C/O Scarsdale Equities, LLC

10 Rockefeller Plaza, Suite 720

New York, NY 10020

FAX Number: 212-969-9013

Email: lowbeer@scarsdale-equities.com

Number of Units Purchased: 125,000

Aggregate Purchase Price: \$519,375

**COMPANY:**

BioTime, Inc.

By: Robert W. Peabody

Title: Sr. VP, COO, and CFO

**PURCHASER:**

ALB Private Investments LLC

By: /s/Francis A Mlynarczyk, Jr.

Title: Manager

Address: C/O Scarsdale Equities, LLC

10 Rockefeller Plaza, Suite 720

New York, NY 10020

FAX Number: 212-969-9013

Email: frank@scarsdale-equities.com

Number of Units Purchased: 125,000

Aggregate Purchase Price: \$519,375



**COMPANY:**

BioTime, Inc.

By: Robert W. Peabody

Title: Sr. VP, COO, and CFO

**PURCHASER:**

By: /s/Patrick Lin

Title: Partner

Address: C/O Primarius Capital

21 "C" Orinda Way #138

Orinda, CA 94563

FAX Number: 925-402-4380

Email: Patrick@Primariuscapital.com

Number of Units Purchased: 240,676

Aggregate Purchase Price: \$1,000,008.78

THIS WARRANT CERTIFICATE AND THE WARRANTS REPRESENTED HEREBY ARE SUBJECT TO RESTRICTIONS ON TRANSFER SET FORTH IN THIS WARRANT CERTIFICATE, INCLUDING SECTION 3 HEREOF, AND NO TRANSFER OF THE WARRANTS REPRESENTED HEREBY MAY BE MADE WITHOUT THE ISSUANCE BY THE COMPANY OF A NEW WARRANT CERTIFICATE IN THE NAME OF THE TRANSFEREE.

THIS WARRANT CERTIFICATE MAY REPRESENT FEWER WARRANTS THAN THE INITIAL NUMBER OF WARRANTS SET FORTH BELOW. THE NUMBER OF WARRANTS REPRESENTED BY THIS CERTIFICATE AT ANY TIME WILL BE MAINTAINED BY THE COMPANY IN ITS RECORDS. ANYONE WISHING TO KNOW THE NUMBER OF WARRANTS REPRESENTED BY THIS WARRANT CERTIFICATE AT ANY TIME SHOULD CONTACT THE COMPANY AT 1301 HARBOR BAY PARKWAY, ALAMEDA, CALIFORNIA 94501; ATTENTION: CHIEF FINANCIAL OFFICER; (510) 521-3390.

[FORM OF WARRANT CERTIFICATE]

BIOTIME, INC.

WARRANTS TO PURCHASE COMMON STOCK

Warrant Certificate No. \_\_\_\_\_

Initial Number of Warrants: \_\_\_\_\_ ("Warrants")

Date of Issuance: June [ ], 2013 ("Issuance Date")

BioTime, Inc., a California corporation (the "**Company**"), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, [BUYER], the registered holder hereof (the "**Holder**"), is entitled, subject to the terms set forth below, for each Warrant represented by this Warrant Certificate, to purchase from the Company, at the Exercise Price (as defined below) then in effect, at any time or times on or after the Issuance Date, but not after 11:59 p.m., California time, on the Expiration Date, (as defined below), one (1) fully paid nonassessable share of Common Stock, subject to adjustment as provided herein (each a "**Warrant Share**"). Except as otherwise defined herein, capitalized terms in this Warrant Certificate, shall have the meanings set forth in Section 16. This Warrant Certificate represents Warrants to purchase Common Stock issued pursuant that certain Stock and Warrant Purchase Agreement, dated as of May [ ], 2013, by and among the Company and the investors referred to therein (the "**Securities Purchase Agreement**").

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1. EXERCISE OF WARRANTS.

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), all or any portion of the Warrants represented by this Warrant Certificate may be exercised by the Holder at any time or times on or after the Issuance Date (provided that each Warrant must be exercised in whole and may not be exercised in part) by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the "**Exercise Notice**"), duly completed and executed by Holder, stating Holder's election to exercise Warrants and specifying the number of Warrants being exercised and (ii) (A) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of Warrant Shares for which a Warrant is then exercisable, multiplied by the number of Warrants being exercised (the "**Aggregate Exercise Price**") by wire transfer of immediately available funds, or if the provisions of Section 1(d) are applicable, (B) by notifying the Company that a specified number of Warrants represented by this Warrant Certificate are being exercised pursuant to a Cashless Exercise (as defined in Section 1(d)). The Holder shall not be required to deliver the original Warrant Certificate in order to effect an exercise hereunder. However, once all Warrants represented hereunder have been exercised in full, following the final exercise thereof, the Holder shall promptly return the original Warrant Certificate to the Company for cancellation. Execution and delivery of the Exercise Notice with respect to less than all of the Warrants shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants. If Warrant Shares are to be issued to a person other than the Holder or an affiliate of the Holder, the Holder's signature must be guaranteed by a financial institution that is a participant in a recognized signature guarantee program. On or before the first (1<sup>st</sup>) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile an acknowledgment of confirmation of receipt of the Exercise Notice to the Holder and the Company's transfer agent (the "**Transfer Agent**"), if any. On or before the third (3<sup>rd</sup>) Trading Day following the date on which the Company has received the Exercise Notice, so long as the Holder delivers the Aggregate Exercise Price (or, if applicable, notice of a Cashless Exercise) on or prior to the second (2<sup>nd</sup>) Trading Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**") (provided that if the Aggregate Exercise Price has not been delivered by such date, the Share Delivery Date shall be one (1) Trading Day after the Aggregate Exercise Price is delivered), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program, credit the aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, or if there is no Transfer Agent, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the issuance of Warrant Shares via DTC, if any. Upon delivery of the Exercise Notice duly completed and executed by Holder and so long as the Holder delivers the Aggregate Exercise Price (or, if applicable, notice of a Cashless Exercise) on or prior to the second (2<sup>nd</sup>) Trading Day following the date on which the Company has received the Exercise Notice, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which Warrants have been exercised, irrespective of the date such Warrant Shares are credited to the Holder's DTC account or the date of delivery of the certificates evidencing such Warrant Shares, as the case may be. If this Warrant Certificate is submitted in connection with any exercise pursuant to this Section 1(a) and the number of Warrants represented by this Warrant Certificate submitted for exercise is greater than the number of Warrants being exercised, then the Company shall as soon as practicable and in no event later than three (3) Trading Days after any exercise and at its own expense, issue a new Warrant Certificate (in accordance with Section 7(c)) representing the number of Warrants issuable immediately prior to such exercise under this Warrant Certificate, less the number of Warrants exercised. No fractional Warrant Shares are to be issued upon the exercise of any Warrants, but rather the number of Warrant Shares to be issued shall be rounded down to the nearest whole number and the Company shall refund to Holder in cash the portion of the Exercise Price allocable to the fraction of a Warrant Share not issued. The Company shall pay any and all taxes which may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of any Warrants.

(b) Exercise Price. "**Exercise Price**" means the price payable for the purchase of each Warrant Share upon the exercise of a Warrant, which shall initially be \$5.00, and shall be subject to adjustment as provided herein.

(c) Company's Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to issue to the Holder on or prior to the Share Delivery Date, a certificate for the number of Warrant Shares to which the Holder is entitled and register such Warrant Shares on the Company's share register or to credit the Holder's balance account with DTC for such number of Warrant Shares to which the Holder is entitled upon the Holder's exercise of Warrants, as applicable, then, in addition to all other remedies available to the Holder, the Company (X) shall pay in cash to the Holder on each day after such third (3<sup>rd</sup>) Trading Day that the issuance of such shares of Common Stock is not timely effected an amount equal to 1.5% of the product of (A) the sum of the number of Warrant Shares not issued to the Holder on a timely basis and to which the Holder is entitled and (B) the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the last possible date which the Company could have issued such Warrant Shares of Common Stock to the Holder without violating Section 1(a), or if the Warrant Shares are then not traded on an Eligible Market, the Exercise Price, and (Y) the Holder, upon written notice to the Company, may void its Exercise Notice with respect to, and retain or have returned, as the case may be, any Warrants represented by this Warrant Certificate that have not been exercised pursuant to such Exercise Notice; provided that the voiding of an exercise shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 1(c) or otherwise.. In addition to the foregoing, if on or prior to the Share Delivery Date the Company shall fail to issue and deliver a certificate to the Holder and register such shares of Common Stock on the Company's share register or credit the Holder's balance account with DTC for the number of shares of Common Stock to which the Holder is entitled upon the Holder's exercise hereunder or pursuant to the Company's obligation pursuant to clause (ii) below, as applicable, and if on or after such Trading Day the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, within three (3) Trading Days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to issue such shares of Common Stock) or credit such Holder's balance account with DTC for such shares of Common Stock shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit such Holder's balance account with DTC and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the Closing Bid Price on the date of exercise. Nothing shall limit the Holder's right to pursue a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the exercise of Warrants as required pursuant to the terms hereof.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if the Common Stock is then traded on an Eligible Market and a registration statement under the 1933 Act permitting the resale of the Warrant Shares is not in effect under the 1933 Act, the Holder may, in its sole discretion, exercise any or all Warrants represented by this Warrant Certificate by electing, in lieu of paying the Aggregate Exercise Price in cash, to receive upon such exercise the "Net Number" of shares of Common Stock determined according to the following formula (a "**Cashless Exercise**"):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A= the total number of shares with respect to which Warrants are then being exercised as stated in the Exercise Notice.

B= the Closing Sale Price of the Common Stock on the Trading Day immediately preceding date of the Exercise Notice.

C= the Exercise Price then in effect at the time of such exercise.

In such event, the number of Warrants remaining for exercise shall be reduced by the number of Warrants then exercised and execution and delivery of the Exercise Notice with respect to less than all of the Warrants represented by the Warrant Certificate shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants exercised).

For purposes of Rule 144(d) promulgated under the 1933 Act, as in effect on the date hereof, it is intended that the Warrant Shares issued in a Cashless Exercise shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant Certificate was originally issued pursuant to the Securities Purchase Agreement. In addition, if the Warrant Shares are issued in a Cashless Exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the 1933 Act, the Warrant Shares shall take on the registered characteristics of the Warrants being exercised. The Company agreed not to take any position contrary to this Section 1(d).

(e) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 12.

(f) Limitation on Beneficial Ownership. The Company shall not effect the exercise of any Warrants, and the Holder shall not have the right to exercise any Warrants, to the extent that after giving effect to such exercise, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 9.99% (the "**Maximum Percentage**") of the shares of Common Stock outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon exercise of Warrants with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (A) exercise of the remaining, unexercised Warrants represented by this Warrant Certificate and beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including the Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 1(f). For purposes of this Section 1(f), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act. For purposes of determining the number of outstanding shares of Common Stock the Holder may acquire upon the exercise of Warrants without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the Securities and Exchange Commission (the "**SEC**"), as the case may be, (y) a more recent public announcement by the Company or (3) any other written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding (the "**Reported Outstanding Share Number**"). If the Company receives an Exercise Notice from a Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify such Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Exercise Notice would otherwise cause the Holder's beneficial ownership, as determined pursuant to this Section 1(f), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of Warrants to be exercised pursuant to such Exercise Notice (the number of Warrants by which such exercise is reduced, the "**Reduction Warrants**") and (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for Reduction Warrants. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Business Day confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including any Warrants, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon exercise of any Warrants results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the Exchange Act), the number of shares so issued by which the Holder's and the other Attribution Parties' aggregate beneficial ownership exceeds the Maximum Percentage (the "**Excess Shares**") shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. As soon as reasonably practicable after the issuance of the Excess Shares has been deemed null and void, the Company shall return to the Holder the exercise price paid by the Holder for the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase (with such increase not effective until the sixty-first (61<sup>st</sup>) day after delivery of such notice) or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61<sup>st</sup>) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Warrants that is not an Attribution Party. For purposes of clarity, the shares of Common Stock underlying Warrants in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the Exchange Act. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 1(f) to the extent necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 1(f) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Warrant Certificate.

(g) Insufficient Authorized Shares. If at any time while any Warrants remain outstanding the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve for issuance upon exercise of such Warrants at least a number of shares of Common Stock of the number of shares of Common Stock (the "**Required Reserve Amount**") as shall from time to time be necessary to effect the exercise of all Warrants then outstanding (an "**Authorized Share Failure**"), then the Company shall promptly take all action necessary to increase the Company's authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for all Warrants then outstanding. Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the later of (a) the occurrence of such Authorized Share Failure, and (b) the filing of a definitive proxy statement or information statement with the SEC under the Exchange Act with respect to a meeting of Company shareholders or solicitation of consent of Company shareholders, the Company shall hold a meeting of its shareholders or shall solicit the written consent of its shareholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting or solicitation of consent, the Company shall provide each shareholder with a proxy statement or information statement and form of proxy or consent for the voting or giving of consent of the Common Stock held by its shareholders. Notwithstanding the foregoing, if at the time of an Authorized Share Failure, the Company is able to obtain the written consent of a majority of the shares of its issued and outstanding Common Stock to approve the increase in the number of authorized shares of Common Stock without the need to solicit votes of its shareholders, the Company may satisfy this obligation by obtaining such consent and submitting for filing with the SEC an Information Statement on Schedule 14C.

2. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF WARRANT SHARES. The Exercise Price and the number of Warrant Shares for which each Warrant may be exercised shall be adjusted from time to time as follows:

(a) Prorata Adjustments. If the Company, at any time after the date of the execution of the Securities Purchase Agreement, shall (i) pay a dividend in shares of Common Stock or make a distribution in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock, (iii) combine its outstanding shares of Common Stock into a smaller number of shares of Common Stock or (iv) reclassify or change (including a change to the right to receive, or a change into, as the case may be (other than with respect to a merger or consolidation pursuant to the exercise of appraisal rights), shares of stock, other securities, property, cash or any combination thereof) its Common Stock (including any such reclassification or change in connection with a consolidation or merger in which the Company is the surviving corporation), the number of Warrant Shares purchasable upon exercise of each Warrant immediately prior thereto shall be adjusted so that the Holder of a Warrant shall be entitled to receive the kind and number of Warrant Shares or other securities of the Company or other property which the Holder would have owned or have been entitled to receive after the happening of any of the events described above, had such Warrant been exercised immediately prior to the happening of such event or any record date with respect thereto. An adjustment made pursuant to this paragraph shall become effective immediately after the effective date of such event retroactive to the record date, if any, for such event.

(b) Options, Warrants and Rights. If the Company, at any time after the date of the execution of the Securities Purchase Agreement, shall issue rights, options or warrants to all holders of its outstanding Common Stock, without any charge to such holders, entitling them to subscribe for or purchase shares of Common Stock at a price per share which is lower at the record date mentioned below than the then Current Market Price per share of Common Stock (as defined in paragraph (d) below), the number of Warrant Shares thereafter purchasable upon the exercise of each Warrant shall be determined by multiplying the number of Warrant Shares theretofore purchasable upon exercise of each Warrant by a fraction, of which the numerator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of additional shares of Common Stock offered for subscription or purchase in connection with such rights, options or warrants, and of which the denominator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of shares which the aggregate exercise price of the total number of shares of Common Stock issuable upon exercise of such rights, options or warrants would purchase at the Current Market Price per share of Common Stock (as determined pursuant to paragraph (d) below) at such record date. Such adjustment shall be made whenever such rights, options or warrants are issued, and shall become effective immediately after the record date for the determination of stockholders entitled to receive such rights, options or warrants.



(c) Distribution of Indebtedness or Assets. If the Company, at any time after the date of the execution of the Securities Purchase Agreement, shall distribute to all holders of its shares of Common Stock (including any distribution made in connection with a merger in which the Company is the surviving corporation) evidences of its indebtedness or assets (excluding cash, dividends or distributions payable out of consolidated earnings or earned surplus and dividends or distributions referred to in paragraph (a) above) or rights, options or warrants, or convertible or exchangeable securities containing the right to subscribe for or purchase shares of Common Stock (excluding those referred to in paragraph (b) above), then in each case the number of Warrant Shares thereafter purchasable upon the exercise of each Warrant shall be determined by multiplying the number of Warrant Shares theretofore purchasable upon the exercise of each Warrant by a fraction, of which the numerator shall be the then Current Market Price per share of Common Stock (as determined pursuant to paragraph (d) below) on the date of such distribution, and of which the denominator shall be the then Current Market Price per share of Common Stock, less the then fair value (as determined in good faith by the Board of Directors of the Company, whose determination shall be conclusive) of the portion of the assets or evidences of indebtedness so distributed or of such subscription rights, options or warrants, or of such convertible or exchangeable securities applicable to one share of Common Stock. Such adjustment shall be made whenever any such distribution is made, and shall become effective on the date of distribution retroactive to the record date for the determination of shareholders entitled to receive such distribution.

(d) Current Market Price. For the purpose of any computation under paragraphs (b) and (c) of this Section, the Current Market Price per share of Common Stock at any date shall be the average of the daily Closing Sale Prices for the 20 consecutive Trading Days ending one Trading Day prior to the date of such computation. If the Current Market Price of the Common Stock cannot be so determined, the Board of Directors of the Company shall reasonably determine in good faith the Current Market Price on the basis of such quotations or other sales information as is available.

(e) Minimum Adjustment. No adjustment pursuant to paragraphs (b) and (c) of this Section in the number of Warrant Shares purchasable upon exercise of each Warrant shall be required unless such adjustment would require an increase or decrease of at least one percent (1%) in the number of Warrant Shares purchasable upon the exercise of a Warrant; provided, however, that any adjustments which by reason of this paragraph (e) are not required to be made shall be carried forward and taken into account in the determination of any subsequent adjustment. All calculations shall be made with respect to the number of Warrant Shares purchasable upon the exercise of a Warrant, to the nearest tenth of a share and with respect to the Exercise Price payable hereunder, to the nearest whole cent.

(f) Adjustment of Exercise Price. Whenever the number of Warrant Shares purchasable upon the exercise of a Warrant is adjusted, as herein provided, the Exercise Price payable for each Warrant Share upon exercise of a Warrant shall be adjusted by multiplying such Exercise Price immediately prior to such adjustment by a fraction, of which the numerator shall be the number of Warrant Shares purchasable upon the exercise of a Warrant immediately prior to such adjustment, and of which the denominator shall be the number of Warrant Shares purchasable upon the exercise of a Warrant immediately thereafter.

(g) Distribution in Lieu of Adjustment. No adjustment in the number of Warrant Shares purchasable upon the exercise of each Warrant need be made under paragraphs (b) and (c) if the Company issues or distributes to the Holder the rights options, warrants, or convertible or exchangeable securities, or evidences of indebtedness or assets referred to in those paragraphs which the Holder would have been entitled to receive had all Warrants represented by this Warrant Certificate been exercised prior to the happening of such event or the record date with respect thereto. No adjustment need be made for a change in the par value of the Warrant Shares.

(h) Voluntary Adjustment By Company. The Company may at any time prior to the Expiration Date reduce the then current Exercise Price payable for each Warrant Share upon exercise of a Warrant to any amount and for any period of time deemed appropriate by the Board of Directors of the Company. Upon each such reduction of the Exercise Price hereunder, the number of Warrant Shares issuable upon exercise of a Warrant immediately prior to such reduction shall be adjusted to the number of shares of Common Stock determined by multiplying the Exercise Price then in effect immediately prior to such reduction by the number of Warrant Shares acquirable upon exercise of a Warrant immediately prior to such reduction and dividing the product thereof by the Exercise Price after giving effect to such reduction.

(i) Notice of Adjustment. Whenever the number of Warrant Shares purchasable upon the exercise of a Warrant or the Exercise Price is adjusted, as herein provided, the Company shall promptly, in any event within ten (10) days send to the Holder notice of such adjustment or adjustments. Such notice shall set forth the number of Warrant Shares purchasable upon the exercise of each Warrant and the Exercise Price after such adjustment, setting forth a brief statement of the facts requiring such adjustment and setting forth the computation by which such adjustment was made.

(j) No Adjustment for Dividends. Except as provided in this Section 2, no adjustment in respect of any dividends shall be made during the term of a Warrant or upon the exercise of a Warrant.

(k) Readjustment of Number of Warrant Shares and Exercise Price; Certain Limitations. If an adjustment of the number of Warrant Shares purchasable upon the exercise of a Warrant or the Exercise Price has been made as a result of the issuance of rights, options or warrants as provided in paragraph (b), or rights, options or warrants or convertible or exchangeable securities as provided in paragraph (c), of this Section 2, upon the expiration of any such rights, options, or warrants, or conversion or exchange privileges under convertible or exchangeable securities, without exercise thereof, the Exercise Price and the number of Warrant Shares purchasable upon the exercise of a Warrant shall, upon such expiration, be readjusted and shall thereafter be such as it would have been had it been originally adjusted (or had the original adjustment not been required, as the case may be) as if (A) the only shares of Common Stock so issued were the shares of Common Stock, if any, actually issued or sold upon the exercise of such rights, options, warrants or conversion or exchange rights and (B) such shares of Common Stock, if any, were issued or sold for the consideration actually received by the Company upon such exercise plus the aggregate consideration, if any, actually received by the Company for the issuance, sale or grant of all such rights, options, warrants or conversion or exchange rights whether or not exercised. Except as provided in this paragraph, no reduction in the number of Warrant Shares purchasable upon the exercise of a Warrant or increase in the Exercise Price shall be made as a result of the issuance or distribution of rights, options or warrants or convertible or exchangeable securities as described in paragraphs (b) or (c) of this Section 2.

(l) Statement on Warrants. Irrespective of any adjustments in the Exercise Price or the number or kind of shares purchasable upon the exercise of the Warrants, unless the Holder requests that the Warrant Certificate be reissued to reflect such adjustment(s), other than the notice requirement otherwise contemplated herein, the Company shall not be required to re-issue the Warrant Certificate to reflect such adjustment(s).

3. TRANSFERABILITY OF WARRANTS AND WARRANT SHARES; RESTRICTIONS ON TRANSFER.

(a) Registration. This Warrant Certificate shall be numbered and shall be registered on the books of the Company (the “**Warrant Register**”) as issued. The Company shall be entitled to treat the Holder of any Warrant Certificate as the owner in fact of the Warrants represented by such Warrant Certificate for all purposes and shall not be bound to recognize any equitable or other claim or interest in such Warrants on the part of any other person, and shall not be liable for any registration of transfer of any Warrant which is registered or to be registered in the name of a fiduciary or the nominee of a fiduciary upon the instruction of such fiduciary, unless made with the actual knowledge that a fiduciary or nominee is committing a breach of trust in requesting such registration of transfer, or with such knowledge of such facts that its participation therein amounts to bad faith.

(b) Transfer. The Warrants shall be transferable on the Warrant Register only upon delivery of this Warrant Certificate duly endorsed by the Holder or by his duly authorized attorney or representative, or accompanied by proper evidence of succession, assignment or authority to transfer. In all cases of transfer by an attorney, the original power of attorney, duly approved, or a copy thereof, duly certified, shall be deposited and remain with the Company. In case of transfer by executors, administrators, guardians or other legal representatives, duly authenticated evidence of their authority shall be produced, and a copy thereof may be required to be deposited and remain with the Company in its discretion. Upon any registration of transfer, the Company shall promptly execute and deliver a new Warrant Certificate or Warrant Certificates to the persons entitled thereto. Prior to transferring any Warrants, the Holder shall notify any prospective Transferee of the number of Warrants represented by this Warrant Certificate at the time of such transfer as set forth in the Company’s records. For the avoidance of doubt, no consent of the Company shall be required with respect to any transfer by the Holder to any Purchaser (as such term is defined in the Securities Purchase Agreement). **NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, NO TRANSFER OF THIS WARRANT CERTIFICATE OR THE WARRANTS REPRESENTED HEREBY SHALL BE EFFECTIVE UNLESS THE HOLDER DELIVERS THIS WARRANT CERTIFICATE TO THE COMPANY AND THE COMPANY ISSUES A NEW CERTIFICATE IN THE NAME OF THE TRANSFEREE FOR THE NUMBER OF WARRANTS REMAINING TO BE EXERCISED AS SET FORTH IN THE RECORDS OF THE COMPANY OR SUCH LESSER AMOUNT OF WARRANTS BEING TRANSFERRED (IN WHICH CASE THE COMPANY SHALL ISSUE TO THE HOLDER A NEW WARRANT CERTIFICATE IN THE NAME OF THE HOLDER FOR THE NUMBER OF WARRANTS REMAINING TO BE EXERCISED AS SET FORTH IN THE RECORDS OF THE COMPANY MINUS THE AMOUNT OF WARRANTS BEING TRANSFERRED). ANY PURPORTED TRANSFER IN VIOLATION OF THE FOREGOING SHALL BE NULL AND VOID.**

4. PURCHASE RIGHTS; FUNDAMENTAL TRANSACTIONS.

(a) Fundamental Transactions. If the Company enters into a Fundamental Transaction, the Successor Entity (or, if the Common Stock shall be converted into or exchanged for capital stock or other securities of an Affiliate of the Successor Entity, such Affiliate) shall execute an agreement providing that the Holder shall have the right thereafter to receive, upon exercise of each Warrant at any time after the occurrence or consummation of the Fundamental Transaction, such shares of capital stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights and any shares of Common Stock) which the Holder would have been entitled to receive upon the occurrence or consummation of such Fundamental Transaction, had such Warrant been exercised immediately prior to such Fundamental Transaction. Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Holder. The provisions of this Section shall apply similarly and equally to successive Fundamental Transactions.

(b) Right to Require Purchase. Notwithstanding the foregoing, in the event of a Fundamental Transaction other than one in which a Successor Entity that is a publicly traded corporation whose stock is quoted or listed for trading on an Eligible Market assumes all obligations under this Warrant Certificate such that the Warrants represented thereby shall be exercisable for the publicly traded common stock of such Successor Entity, at the request of the Holder delivered before the ninetieth (90<sup>th</sup>) day after the consummation of such Fundamental Transaction, the Company (or the Successor Entity) shall purchase all, but not less than all, of the remaining unexercised Warrants from the Holder by paying to the Holder, within five (5) Business Days after such request (or, if later, five (5) Business Days after the effective date of the Fundamental Transaction), cash in an amount equal to the Black Scholes Value of the remaining unexercised Warrants on the date of such Fundamental Transaction.

5. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Incorporation or Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant Certificate, and will at all times in good faith carry out all the provisions of this Warrant Certificate and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any shares of Common Stock receivable upon the exercise of Warrants above the Exercise Price then in effect, (ii) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon the exercise of Warrants, and (iii) shall, so long any Warrants are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued shares of Common Stock, solely for the purpose of effecting the exercise of the Warrants.

6. WARRANT HOLDER NOT DEEMED A SHAREHOLDER. The Holder, solely in such Person's capacity as a holder of Warrants, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant Certificate be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant Certificate, any of the rights of a shareholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of the Warrants. In addition, nothing contained in this Warrant Certificate shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of Warrants or otherwise) or as a shareholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section, the Company shall provide the Holder with copies of the same notices and other information given to the shareholders of the Company generally, contemporaneously with the giving thereof to the shareholders.

7. REISSUANCE OF WARRANT CERTIFICATE.

(a) Lost, Stolen or Mutilated Warrant Certificate. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant Certificate, and, in the case of loss, theft or destruction, of any indemnification undertaking or bond by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Warrant Certificate, the Company shall execute and deliver to the Holder a new Warrant Certificate (in accordance with Section 7(c)) representing the right to purchase the Warrant Shares then underlying the Warrants represented by this Warrant Certificate.

(b) Exchangeable for Multiple Warrant Certificates. This Warrant Certificate is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant Certificate or Certificates (in accordance with Section 7(c)) representing the number of Warrants then represented by this Warrant Certificate, and each such new Warrant Certificate will represent such portion of such Warrants as is designated by the Holder at the time of such surrender; provided, however, that no fractional Warrants shall be given.

(c) Issuance of New Warrant Certificates. Whenever the Company is required to issue a new Warrant Certificate pursuant to the terms of this Warrant Certificate, such new Warrant Certificate (i) shall be of like tenor with this Warrant Certificate, (ii) shall represent, as indicated on the face of such new Warrant Certificate, the number of unexercised Warrants then underlying this Warrant Certificate (and in the case of a new Warrant Certificate being issued pursuant to Section 7(b), the number of Warrants designated by the Holder which, when added to the number of Warrants represented by the other new Warrant Certificates issued in connection with such issuance, does not exceed the number of unexercised Warrants then represented by this Warrant Certificate), (iii) shall have an issuance date, as indicated on the face of such new Warrant Certificate which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant Certificate.

8. NOTICES. Any notice pursuant to this Warrant Certificate by any Holder to the Company shall be in writing and shall be delivered in person, or mailed first class, postage prepaid, or sent by air delivery service or by facsimile transmission (FAX) or email to the Company, at its office, Attention: Chief Financial Officer. The address of the principal office of the Company is 1301 Harbor Bay Parkway, Alameda, California 94502; attention Chief Financial Officer; FAX (510) 521-3389; email rpeabody@biotimemail.com. Any notice given pursuant to this Warrant Certificate by the Company to a Holder shall be in writing and shall be mailed first class, postage prepaid, or sent by air delivery service, or by facsimile transmission (FAX) or email, or otherwise delivered to such Holder at the Holder's address on the books of the Company. The timing of delivery of notices hereunder shall be in accordance with the notice provisions set forth in the Securities Purchase Agreement. Each party hereto and any Holder may from time to time change the address to which notices to it are to be delivered or mailed hereunder by notice to the other party. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant Certificate, including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Exercise Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment, and (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the shares of Common Stock, (B) with respect to any grants, issuances or sales of any options, convertible securities or rights to purchase stock, warrants, securities or other property to holders of shares of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation; provided in each case that such information shall be made publicly known to the shareholders of the Company prior to or in conjunction with such notice being provided to the Holder. It is expressly understood and agreed that the time of execution specified by the Holder in each Exercise Notice shall be definitive and may not be disputed or challenged by the Company.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Warrant Certificate may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder.

10. GOVERNING LAW; JURISDICTION. This Warrant Certificate shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant Certificate shall be governed by, the internal laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of California. The Company and the Holder hereby irrevocably submits to the non-exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan and the Superior Court for the County of Alameda and the United States District Court for the Northern District of California for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper.

11. CONSTRUCTION; HEADINGS. This Warrant Certificate shall be deemed to be jointly drafted by the Company and Holder and shall not be construed against any Person as the drafter hereof. The headings of this Warrant Certificate are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant Certificate.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares purchasable upon exercise of Warrants, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two (2) Business Days submit via facsimile (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Holder or (b) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant Certificate shall be cumulative and in addition to all other remedies available under this Warrant Certificate and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual damages for any failure by the Company to comply with the terms of this Warrant Certificate.

14. SEVERABILITY. If any provision of this Warrant Certificate is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Warrant Certificate so long as this Warrant Certificate as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

15. **DISCLOSURE.** Upon receipt or delivery by the Company of any notice in accordance with the terms of this Warrant, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries, the Company shall within four (4) Business Days after any such receipt or delivery publicly disclose such material, nonpublic information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, nonpublic information relating to the Company or its Subsidiaries, the Company so shall indicate to such Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries.

16. **CERTAIN DEFINITIONS.** For purposes of this Warrant Certificate, the following terms shall have the following meanings:

(a) "**1933 Act**" means the Securities Act of 1933, as amended.

(b) "**Affiliate**" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(c) "**Attribution Parties**" means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Holder's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a "group" within the meaning of Section 13(d) of the Exchange Act and Rule 13d-5 thereunder, together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the Holder's and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(d) "**Black Scholes Value**" means the value of the Warrants represented by this Warrant Certificate based on the Black and Scholes Option Pricing Model obtained from the "OV" function on Bloomberg determined as of the day immediately following the public announcement of the applicable Fundamental Transaction for pricing purposes and reflecting (i) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of the Warrants as of such date of request, (ii) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg as of the day immediately following the public announcement of the applicable Fundamental Transaction, (iii) the underlying price per share used in such calculation shall be the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in the Fundamental Transaction, (iv) a zero cost of borrow and (v) a 360 day annualization factor.



(e) "**Bloomberg**" means Bloomberg Financial Markets.

(f) "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(g) "**Closing Bid Price**" and "**Closing Sale Price**" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(h) "**Common Stock**" means (i) the Company's common shares, no par value per share, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

(i) "**Eligible Market**" means the NYSE, the NYSE MKT, The NASDAQ Global Market, The NASDAQ Global Select Market, the NASDAQ Capital Market, or The OTC Bulletin Board.

(j) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

(k) "**Expiration Date**" means the date sixty (60) months after the Issuance Date or, if such date falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a "**Holiday**"), the next day that is not a Holiday.

(l) "**Fundamental Transaction**" means (a) any consolidation of the Company with or merger of the Company into another corporation or in case of any sale, transfer or lease to another corporation of all or substantially all the property of the Company; or (b) any recapitalization or reclassification of the Common Stock or any exchange of Common Stock for any other class of capital stock or other securities of the Company.

(m) "**Person**" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(n) "**Principal Market**" means the principal Eligible Market on which the Common Stock trades.

(o) "**Successor Entity**" means the Person formed by, resulting from, or surviving any Fundamental Transaction.

(p) **"Trading Day"** means any day on which the Common Stock is traded on the Principal Market, provided that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time).

**[Signature Page Follows]**

IN WITNESS WHEREOF, the Company has caused this Warrant Certificate to be duly executed as of the Issuance Date set out above.

**BIOTIME, INC.**

By: \_\_\_\_\_  
Name:  
Title:

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## EXERCISE NOTICE

TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE  
WARRANTS TO PURCHASE COMMON STOCK

## BIOTIME, INC.

The undersigned holder hereby exercises \_\_\_\_\_ Warrants to purchase Common Stock evidenced by the attached Warrant Certificate, which entitles the Holder to purchase \_\_\_\_\_ shares of Common Stock ("**Warrant Shares**") of BioTime, Inc., a California corporation (the "**Company**").

1. Form of Exercise Price. The Holder intends that payment of the Exercise Price shall be made as:

\_\_\_\_\_ a "Cash Exercise" with respect to \_\_\_\_\_ Warrants; or

\_\_\_\_\_ a "Cashless Exercise" with respect to \_\_\_\_\_ Warrants.

2. Payment of Exercise Price. In the event that the holder has elected a Cash Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the holder shall pay the Aggregate Exercise Price in the sum of \$ \_\_\_\_\_ to the Company in accordance with the terms of the Warrant.

3. Delivery of Warrant Shares. The Company shall deliver to the holder \_\_\_\_\_ Warrant Shares in accordance with the terms of the Warrant Certificate.

Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant Certificate.

Date: \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Name of Registered Holder

By: \_\_\_\_\_

Name:

Title:

[NOTE: The above signature should correspond exactly with the name of the Holder in the Warrant Certificate.]

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## ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs [Transfer Agent] to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated \_\_\_\_\_ from the Company and acknowledged and agreed to by [Transfer Agent].

**BIOTIME, INC.**

By: \_\_\_\_\_

Name:

Title:

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1. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of California and has all requisite corporate power and authority to carry on its business as now conducted. The Company is not an "investment company" or any entity controlled by an "investment company," as such term is defined in the Investment Company Act of 1940, as amended.

2. The Company has the requisite corporate power and authority to execute, deliver and perform all of its obligations under the Agreement, the Warrant Certificates, and the Option Agreements. The Agreement, the Warrant Certificates, and the Option Agreements have been duly authorized, executed and delivered on behalf of the Company and constitute the valid and binding obligations of the Company, enforceable against it in accordance with their respective terms.

3. The Shares to be sold by the Company pursuant to the Agreement, when sold, issued and delivered in accordance with the provisions of the Agreement, including the payment of the Purchase Price as defined in the Agreement, (a) will be duly authorized, validly issued, fully paid and nonassessable, (b) will not have been issued in violation of any preemptive right or any similar right, and (c) each of the purchasers will receive good title to the Shares purchased free and clear of all preemptive or similar rights, and restrictions on transfer, other than restrictions on transfer arising under applicable Federal and state securities laws.

4. The Warrant Shares have been duly authorized and reserved for issuance and, when sold, issued, and delivered upon the proper and valid exercise of the Warrants in accordance with the Warrant Certificates, including the payment of the exercise price as provided in the Warrant Certificates (a) will be duly authorized, validly issued, fully paid and nonassessable, (b) will not have been issued in violation of any preemptive right or any similar right, and (c) each purchaser will receive good title to the Warrant Shares free and clear of all preemptive or similar rights, restrictions on transfer, other than restrictions on transfer arising under applicable Federal and state securities laws.

5. The execution, delivery and performance of the Agreement, the Warrant Certificates, and the offer, issuance and sale of the Shares, Warrants, and Warrant Shares, require no consent of, action by or in respect of, or filing with, any court, governmental body, agency, or official, other than (i) filings that have been made pursuant to applicable state securities laws, if any, (ii) any required filing of the Prospectus or the Prospectus Supplement pursuant to rule 424(b) under the Securities Act of 1933, as amended (the "Securities Act") and (iii) the filing of a Form 8-K pursuant to the Securities Exchange Act of 1934, as amended.

6. Assuming that the representations and warranties of the Purchasers under the Option Agreements are true and correct, the execution, delivery and performance of the Option Agreements requires no consent of, action by or in respect of, or filing with, any court, governmental body, agency, or official.

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7. The execution, delivery and performance of the Agreement, and the issuance and sale of the Shares and Warrants in accordance with the terms and conditions of the Agreement, and the issuance and sale of the Warrant Shares in accordance with the terms and conditions of the Warrant Certificates, by the Company will not result in a breach or violation of any of the terms and provisions of, or constitute a default (or an event which, with the giving of notice or lapse of time or both, constitutes or would constitute a default) under, or give rise to any right of termination, cancellation or acceleration under (1) any statute, rule, regulation or, to our knowledge, order of any governmental agency or body or any court, domestic or foreign, having jurisdiction over the Company or any of its properties, or (2) any agreement or instrument material to the Company known to us to which the Company is a party or by which the Company is bound or to which any of the properties of the Company is subject, or (3) the Articles of Incorporation or Bylaws of the Company.

8. The execution, delivery and performance of the Option Agreements, and the sale of the shares of LifeMap Sciences, Inc. common stock pursuant thereto, in accordance with the terms and conditions of the Option Agreements, by the Company will not result in a breach or violation of any of the terms and provisions of, or constitute a default (or an event which, with the giving of notice or lapse of time or both, constitutes or would constitute a default) under, or give rise to any right of termination, cancellation or acceleration under (1) any statute, rule, regulation or, to our knowledge, order of any governmental agency or body or any court, domestic or foreign, having jurisdiction over the Company or any of its properties, or (2) any agreement or instrument material to the Company known to us to which the Company is a party or by which the Company is bound or to which any of the properties of the Company is subject, or (3) the Articles of Incorporation or Bylaws of the Company.

9. Based solely on a notice of effectiveness from the Securities and Exchange Commission, dated September 7, 2012, the Registration Statement has been declared effective under the Securities Act; any required filing of the Prospectus or the Prospectus Supplement pursuant to rule 424(b) under the Securities Act has been or is expected to be made in the manner and within the time period required by Rule 424(b); and to our knowledge, no stop order suspending the effectiveness of the Registration Statement has been issued and no proceedings for that purpose have been instituted or are pending or threatened by the SEC; and based on the foregoing, the offer and sale of the Shares, Warrants, and Warrant Shares has been registered under the Securities Act.

10. There are no issued and outstanding securities or instruments of the Company known to us containing anti-dilution provisions that will be triggered by the issuance of the Shares, the Warrants or the Warrant Shares.

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## OPTION AGREEMENT

This Option Agreement ("Option") is entered into as of May \_\_, 2013 (the "**Effective Date**") by BioTime, Inc., a California corporation (the "**Company**"), and \_\_\_\_\_ (the "**Purchaser**") in connection that certain Stock and Warrant Purchase Agreement, dated May \_\_, 2013, between the Company and Purchaser (the "**Securities Purchase Agreement**").

1. GRANT OF OPTION.

(a) Option. The Company hereby grants to Purchaser the option (the "**Option**"), in lieu of exercising some or all of the Warrants to purchase shares of common stock of the Company issued to the Purchaser pursuant to the Securities Purchase Agreement dated as of even date herewith (the "**Warrants**" and the certificate representing such Warrants, the "**Warrant Certificate**"), to cancel each such unexercised Warrant and purchase from the Company, at the Exercise Price (as defined below) then in effect, one (1) share of Common Stock of LifeMap Sciences, Inc. ("**LifeMap**") owned by BioTime, subject to adjustment as provided herein (the "**LifeMap Shares**"), free of any liens and charges and preemptive or similar rights. The Option shall expire if not exercised on or before the earlier to occur of (a) 5:00 p.m. New York time on May \_\_, 2016 [*thirty-six months from the Closing Date*] and (b) the date on which all of the Warrants (as defined below) shall have been exercised in full, or sold or transferred otherwise than in a sale or transfer described in Section 4(a) (the "**Expiration Date**").

(b) Minimum Exercise. This Option may be exercised by Purchaser in whole or in part; provided, however, that any partial exercise of this Option shall not be for less than the lower of (i) 10,000 LifeMap Shares and (ii) all of the remaining LifeMap Shares that are issuable as of the applicable date of determination upon the exercise of the Option held by the Purchaser pursuant to the terms hereof.

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2. EXERCISE OF OPTION

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(b) and Section 4), this Option may be exercised by the Purchaser at any time or times on or after the Effective Date, in whole or in part, subject to Section 1(b), by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the "**Exercise Notice**"), duly completed and executed by Purchaser, stating Purchaser's election to exercise this Option, the number of Warrants being cancelled upon exercise of this Option and the number of LifeMap Shares being purchased, and (ii) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of LifeMap Shares purchasable upon cancellation of one Warrant multiplied by the number of Warrants being cancelled (the "**Aggregate Option Exercise Price**") by wire transfer of immediately available funds, or, if the provisions of Section 2(d) are applicable, (B) by notifying the Company that the Option is being exercised pursuant to a Cashless Exercise (as defined in Section 2(d)). The Holder shall not be required to deliver the original Warrant Certificate in order to effect an exercise hereunder. However, once the Option has been exercised in full, following the final exercise thereof, the Holder shall promptly return the original Warrant Certificate to the Company for cancellation. Execution and delivery of the Exercise Notice with respect to less than all of the Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option). On or before the first (1<sup>st</sup>) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile an acknowledgment of confirmation of receipt of the Exercise Notice to the Purchaser and the transfer agent of the LifeMap Shares (the "**Transfer Agent**"), if any. On or before the third (3<sup>rd</sup>) Trading Day following the date on which the Company has received the Exercise Notice, so long as the Purchaser delivers Aggregate Option Exercise Price (or, if applicable, notice of a Cashless Exercise) on or prior to the second (2<sup>nd</sup>) Trading Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**") (provided that if the Aggregate Option Exercise Price has not been delivered by such date, the Share Delivery Date shall be one (1) Trading Day after the Aggregate Option Exercise Price is delivered), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program, credit such aggregate number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise to the Purchaser's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, or if there is no Transfer Agent, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in LifeMap's share in the name of the Purchaser or its designee, for the number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the transfer of LifeMap Shares to the Purchaser via DTC, if any. No fractional LifeMap Shares are to be issued upon the exercise of this Option, but rather the number of LifeMap Shares to be issued shall be rounded down to the nearest whole number and the Company shall refund in cash to Purchaser the portion of the Exercise Price allocable to the fraction of a LifeMap Share not issued. The Company shall pay any and all taxes which may be payable with respect to the transfer of LifeMap Shares to the Purchaser upon exercise of this Option.

(b) Exercise Price. "**Exercise Price**" means the price payable for the purchase of each LifeMap Share upon cancellation of a Warrant in connection with exercise of this Option, which shall initially be \$4.00, and shall be subject to adjustment as provided herein.

(c) Reissue of Warrant Certificate. Upon the exercise of this Option in part, and provided that Purchaser shall have delivered the Warrant Certificate(s) to the Company as permitted under Section 2(a), to the extent that Purchaser continues to hold any unexercised Warrants, the Company shall issue to Purchaser a replacement Warrant Certificate for the number of Warrants that remain unexercised after taking into account the partial exercise of the Option.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if the Common Stock is then traded on an Eligible Market and a registration statement under the 1933 Act permitting the resale of the LifeMap Shares is not in effect under the 1933 Act, the Purchaser may, in its sole discretion, exercise this Option in whole or in part by electing in lieu of paying the Aggregate Option Exercise Price in cash, to receive upon such exercise the "Net Number" of LifeMap Shares determined according to the following formula (a "**Cashless Exercise**"):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A= the total number of LifeMap Shares with respect to which this Option is then being exercised as stated in the Exercise Notice.

B= the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the date of the Exercise Notice.

C= the Exercise Price then in effect at the time of such exercise.

In such event, a number of Warrants equal to the Warrants that would be cancelled if such exercise was effected by paying the Exercise Price in cash shall be cancelled, and the number of Warrants remaining for exercise by Purchaser shall be reduced by the number of Warrants so cancelled, and execution and delivery of the Exercise Notice with respect to less than all of the LifeMap Shares purchasable pursuant to this Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option).

(e) Company's Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to transfer to the Purchaser, or cause LifeMap to issue, on or prior to the Share Delivery Date, a certificate for the number of LifeMap Shares to which the Purchaser is entitled and cause such LifeMap Shares to be registered on LifeMap's share register or to credit the Purchaser's balance account with DTC for such number of LifeMap Shares to which the Purchaser is entitled upon the Purchaser's exercise of this Option, as applicable, then, in addition to all other remedies available to the Purchaser, the Company (X) shall pay in cash to the Purchaser on each day after such third (3<sup>rd</sup>) Trading Day that the transfer of such LifeMap Shares is not timely effected an amount equal to 1.5% of the product of (A) the sum of the number of LifeMap Shares not transferred to the Purchaser on a timely basis and to which the Purchaser is entitled and (B) the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the last possible date which the Company could have transferred such LifeMap Shares to the Purchaser without violating Section 2(a), or if the LifeMap Shares are then not traded on an Eligible Market, the Exercise Price, and (Y) the Purchaser, upon written notice to the Company, may void its Exercise Notice with respect to, and retain or have returned, as the case may be, any Warrants cancelled in connection with such voided exercise; provided that the voiding of an exercise shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 2(e) or otherwise. In addition to the foregoing, if on or prior to the Share Delivery Date, the Company shall fail to transfer, or cause LifeMap to issue, a certificate to the Purchaser and cause the registration of such LifeMap Shares on LifeMap's share register or credit the Purchaser's balance account with DTC for the number of shares of Common Stock to which the Purchaser is entitled upon the Purchaser's exercise hereunder or pursuant to the Company's obligation pursuant to clause (ii) below, as applicable, and if on or after such Trading Day the Purchaser purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Purchaser of shares of Common Stock issuable upon such exercise that the Purchaser anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, within three (3) Trading Days after the Purchaser's request and in the Purchaser's discretion, either (i) pay cash to the Purchaser in an amount equal to the Purchaser's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to transfer LifeMap Shares) or credit such Purchaser's balance account with DTC for such LifeMap Shares shall terminate, or (ii) promptly honor its obligation to deliver to the Purchaser a certificate or certificates representing such shares of Common Stock or credit such Purchaser's balance account with DTC and pay cash to the Purchaser in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the Closing Bid Price on the date of exercise. Nothing shall limit the Purchaser's right to pursue a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing LifeMap Shares (or to electronically deliver such LifeMap Shares) upon the exercise of this Option as required pursuant to the terms hereof.

(f) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares, the Company shall promptly transfer to the Purchaser the number of LifeMap Shares that are not disputed and resolve such dispute in accordance with Section 12.

3. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF LIFEMAP SHARES. The Exercise Price and the number of LifeMap Shares purchasable hereunder shall be adjusted from time to time as follows:

(a) Prorata Adjustments. If LifeMap, at any time after the Effective Date, shall (A) pay a dividend in Common Stock or make a distribution in Common Stock, (B) subdivide its outstanding Common Stock, (C) combine its outstanding Common Stock into a smaller number of shares of Common Stock or (D) reclassify or change (including a change to the right to receive, or a change into, as the case may be (other than with respect to a merger or consolidation pursuant to the exercise of appraisal rights), shares of stock, other securities, property, cash or any combination thereof) its Common Stock (including any such reclassification or change in connection with a consolidation or merger in which LifeMap is the surviving corporation), the number of LifeMap Shares purchasable hereunder upon cancellation of each Warrant in connection with the exercise of this Option immediately prior thereto shall be adjusted so that the Purchaser shall be entitled to receive from the Company the kind and number of shares of Common Stock or other securities of LifeMap or other property which the Purchaser would have owned or have been entitled to receive after the happening of any of the events described above, had such Warrant been cancelled in connection with the exercise of this Option immediately prior to the happening of such event or any record date with respect thereto. An adjustment made pursuant to this paragraph shall become effective immediately after the effective date of such event retroactive to the record date, if any, for such event.

(b) Options, Warrants and Rights. If LifeMap at any time after the Effective Date, shall issue rights, options or warrants to all holders of its outstanding Common Stock, without any charge to such holders, entitling them to subscribe for or purchase Common Stock at a price per share which is lower at the record date mentioned below than the then Current Market Price (as defined in paragraph (d) below) per share of the Common Stock, the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of additional shares of Common Stock offered for subscription or purchase in connection with such rights, options or warrants, and of which the denominator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of shares which the aggregate exercise price of the total number of shares of Common Stock issuable upon exercise of such rights, options or warrants would purchase at the Current Market Price per share of the Common Stock (as determined pursuant to paragraph (d) below) at such record date. Such adjustment shall be made whenever such rights, options or warrants are issued, and shall become effective immediately after the record date for the determination of stockholders entitled to receive such rights, options or warrants

(c) Distribution of Indebtedness or Assets. If LifeMap at any time after the Effective Date, shall distribute to all holders of its Common Stock (including any distribution made in connection with a merger in which LifeMap is the surviving corporation) evidences of its indebtedness or assets (excluding cash, dividends or distributions payable out of consolidated earnings or earned surplus and dividends or distributions referred to in paragraph (a) above) or rights, options or warrants, or convertible or exchangeable securities containing the right to subscribe for or purchase Common Stock (excluding those referred to in paragraph (b) above), then in each case the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the then Current Market Price per share of Common Stock (as determined pursuant to paragraph (d) below) on the date of such distribution, and of which the denominator shall be the then Current Market Price per share of Common Stock, less the then fair value (as determined in good faith by the Board of Directors of the Company whose determination shall be conclusive) of the portion of the assets or evidences of indebtedness so distributed or of such subscription rights, options or warrants, or of such convertible or exchangeable securities applicable to one LifeMap Share. Such adjustment shall be made whenever any such distribution is made, and shall become effective on the date of distribution retroactive to the record date for the determination of shareholders entitled to receive such distribution.

(d) Current Market Price. For the purpose of any computation under paragraphs (b) and (c) of this Section, the "Current Market Price" per share of Common Stock at any date shall be the average of the daily Closing Sale Prices for the 20 consecutive Trading Days ending one Trading Day prior to the date of such computation. If the Current Market Price of the Common Stock cannot be so determined, the Board of Directors of the Company shall reasonably determine in good faith the Current Market Price on the basis of such quotations or other sales information as is available.

(e) Minimum Adjustment. No adjustment pursuant to paragraphs (b) and (c) of this Section 3 in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be required unless such adjustment would require an increase or decrease of at least one percent (1%) in the number of LifeMap Shares purchasable upon cancellation of such Warrant; provided, however, that any adjustments which by reason of this paragraph (e) are not required to be made shall be carried forward and taken into account in the determination of any subsequent adjustment. All calculations shall be made with respect to the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option, to the nearest tenth of a share and with respect to the Exercise Price payable hereunder, to the nearest whole cent.

(f) Adjustment of Exercise Price. Whenever the number of LifeMap Shares purchasable upon the exercise of this Option is adjusted, as herein provided, the Exercise Price payable upon exercise of this Option shall be adjusted by multiplying such Exercise Price immediately prior to such adjustment by a fraction, of which the numerator shall be the number of LifeMap Shares purchasable upon the exercise of this Option immediately prior to such adjustment, and of which the denominator shall be the number of LifeMap Shares purchasable immediately thereafter.

(g) Distribution in Lieu of Adjustment. No adjustment in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option need be made under paragraphs (b) and (c) of this Section 3 if the Company delivers to the Purchaser the rights options, warrants, or convertible or exchangeable securities, or evidences of indebtedness or assets referred to in those paragraphs which the Purchaser would have been entitled to receive had this Option been exercised in full prior to the happening of such event or the record date with respect thereto. No adjustment need be made for a change in the par value of the LifeMap Shares.

(h) Notice of Adjustment. Whenever the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or the Exercise Price of such LifeMap Shares is adjusted, as herein provided, the Company shall promptly, in any event within ten (10) days send to the Purchaser notice of such adjustment or adjustments. Such notice shall set forth the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option and the Exercise Price of such LifeMap Shares after such adjustment, setting forth a brief statement of the facts requiring such adjustment and setting forth the computation by which such adjustment was made.

(i) No Adjustment for Dividends. Except as provided in this Section 3, no adjustment in respect of any dividends shall be made during the term of this Option or upon the exercise of this Option.

(j) Readjustment of Number of LifeMap Shares and Exercise Price; Certain Limitations. If an adjustment of the number of LifeMap Shares purchasable upon cancellation of each Warrant or the Exercise Price has been made as a result of the issuance of rights, options or warrants as provided in paragraph (b), or rights, options or warrants or convertible or exchangeable securities as provided in paragraph (c), of this Section 3, upon the expiration of any such rights, options, or warrants, or conversion or exchange privileges under convertible or exchangeable securities, without exercise thereof, the Exercise Price and the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall, upon such expiration, be readjusted and shall thereafter be such as it would have been had it been originally adjusted (or had the original adjustment not been required, as the case may be) as if (A) the only shares of Common Stock so issued were the shares of Common Stock, if any, actually issued or sold upon the exercise of such rights, options, warrants, or conversion or exchange rights and (B) such shares of Common Stock, if any, were issued or sold for the consideration actually received by LifeMap upon such exercise plus the aggregate consideration, if any, actually received by LifeMap for the issuance, sale or grant of all such rights, options, warrants, or conversion or exchange rights whether or not exercised. Except as provided in this paragraph, no reduction in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or increase in the Exercise Price shall be made as a result of the issuance or distribution of rights, options or warrants, or convertible or exchangeable securities as described in paragraphs (b) or (c) of this Section 3.

4. RESTRICTIONS ON TRANSFER.

(a) Transfer. This Option is personal to the Purchaser and may not be sold, transferred or assigned, except (i) to a successor in interest of the Purchaser as a result of any consolidation of the Purchaser with or merger of the Purchaser into another Person, (ii) to another Purchaser (as defined in the Securities Purchase Agreement) or (iii) to another Person as part of a sale of all or substantially all the property of the Purchaser to such other Person.

(b) Restrictions on Transfer of LifeMap Shares.

(i) Any LifeMap Shares purchased by Purchaser upon the exercise of this Option, may not be sold, pledged, hypothecated, transferred or assigned, in whole or in part, unless (A) a registration statement under the 1933 Act and under any applicable state securities laws is effective therefor or (B) an exemption from such registration is then available and an opinion of counsel, reasonably acceptable to LifeMap and the Transfer Agent, if any, has been rendered stating that such sale, pledge, hypothecation, transfer or assignment will not violate the 1933 Act. Notwithstanding anything to the contrary contained herein (x) the LifeMap Shares may be pledged in connection with a bona fide margin account or other loan or financing arrangement secured by the securities and no legal opinion shall be required therefor and (y) no representation, warranty, covenant or opinion shall be required for the sale, pledge, hypothecation, transfer or assignment of any LifeMap Shares if a registration statement with respect to the resale of such LifeMap Shares is effective at the time of any such sale, pledge, hypothecation, transfer or assignment.

(ii) As a condition precedent to the registration of transfer of any certificates representing LifeMap Shares upon the exercise of this Option or transfer of LifeMap Shares, the Company and LifeMap shall be entitled to obtain a letter or other instrument from the Purchaser containing such covenants, representations or warranties by such Purchaser similar to those contained in this Section 4 as reasonably deemed necessary by the Company or LifeMap to effect compliance by the Company or LifeMap with the requirements of the 1933 Act and any other applicable federal and/or state securities laws.

(iii) Any sale, pledge, hypothecation, transfer, or assignment of this Option or LifeMap Shares in violation of the foregoing restrictions shall be deemed null and void and of no binding effect.

(iv) The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares not made pursuant to registration under the 1933 Act and applicable state securities laws, or pursuant to an available exemption from registration under the 1933 Act and applicable state securities laws.

(v) The LifeMap Shares shall bear an appropriate legend, conspicuously disclosing the restrictions on transfer, under this Section 4, until the same are registered for sale under the 1933 Act or are transferred in a transaction exempt from registration under the 1933 Act entitling the transferee to receive securities that are not deemed to be "restricted securities" as such term is defined in Rule 144 under the 1933 Act. The Company agrees that upon the sale of LifeMap Shares pursuant to a registration statement or an exemption entitling the transferee to receive securities that are not deemed to be "restricted securities," or at such time as registration under the 1933 Act shall no longer be required, upon the presentation of the certificates containing such a legend to the transfer agent or warrant agent, if any, it will request removal of such legend; provided, that unless the request for removal of the legend is in connection with a sale registered under the 1933 Act, the Purchaser shall have provided an opinion of counsel, acceptable to the Company and the Transfer Agent to the effect that such legend may be removed in compliance with the 1933 Act.

(c) Investment Representations. Each Purchaser makes the following representations, severally and not jointly and severally, in connection with its acquisition of this Option and any LifeMap Shares upon the exercise of this Option:

(i) Purchaser has made such investigation of LifeMap as Purchaser deemed appropriate for determining to acquire (and thereby make an investment in) this Option and LifeMap Shares, and in making such investigation Purchaser has had access to such financial and other information concerning LifeMap as Purchaser requested. Purchaser is relying on the information communicated to Purchaser in writing by LifeMap or the Company. Purchaser has not relied on any statement or representations inconsistent with those communicated to Purchaser in writing by LifeMap or the Company. Purchaser has had a reasonable opportunity to ask questions of and receive answers from the executive officers of LifeMap and the Company concerning LifeMap, and to obtain additional information, to the extent possessed or obtainable by LifeMap or the Company without unreasonable effort or expense, necessary to verify the information communicated or provided to Purchaser. All such questions have been answered to Purchaser's satisfaction.

(ii) Purchaser is acquiring this Option and upon exercise of this Option will purchase LifeMap Shares solely for Purchaser's own account, and Purchaser has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of the LifeMap Shares or this Option; provided, that this representation and warranty shall not prohibit Purchaser from selling LifeMap Shares in the ordinary course of business pursuant to a registration statement under the 1933 Act or otherwise in compliance with the 1933 Act and applicable state securities or "blue sky" laws.

(iii) Purchaser is an "accredited investor" as defined in Rule 501 under the 1933 Act.

(iv) Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in this Option and LifeMap Shares, and has so evaluated the merits and risks of such investment. Such Purchaser is able to bear the economic risk of an investment in this Option and LifeMap Shares and, at the present time, is able to afford a complete loss of such investment.

5. REGISTRATION RIGHTS. The Company hereby covenants and agrees that in the event the Company receives any registration rights from LifeMap in respect of any shares of Common Stock owned by the Company, simultaneously with the exercise of any such registration rights at any time that this Option remains exercisable in whole or in part, the Company shall cause LifeMap to register all of the LifeMap Shares issuable to the Purchaser as of the applicable date of determination pursuant to the terms of this Option. The Company acknowledges and agrees that prior to excluding any LifeMap Shares from any registration statement, it shall first exclude all other shares of Common Stock owned by the Company other than any shares of Common Stock that are subject to an option provided to another Purchaser (as defined in the Securities Purchase Agreement) which shall be subject to exclusion on a pro rata basis with all other Purchasers (as defined in the Securities Purchase Agreement). The Company shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, including, without limitation, any assignment of any registration rights with respect to the Common Stock purchasable pursuant to this Option granted to the Company under any registration rights agreement by LifeMap and the Company or under any registration statement, as Purchaser may reasonably request in order to carry out the intent and accomplish the purposes of this Section 5.



6. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Incorporation, Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Option, and will at all times in good faith carry out all the provisions of this Option and take all action as may be required to protect the rights of the Purchaser. Without limiting the generality of the foregoing, the Company shall continue to hold a sufficient number of LifeMap Shares to permit Purchaser to exercise this Option in full. The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares in violation of the immediately preceding sentence.

7. PURCHASER NOT DEEMED A LIFEMAP SHAREHOLDER. The Purchaser, solely in such Person's capacity as the holder of this Option, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of LifeMap for any purpose, nor shall anything contained in this Option be construed to confer upon the Purchaser, solely in such Person's capacity as the holder of this Option, any of the rights of a shareholder of LifeMap or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the purchase of the LifeMap Shares through the due exercise of this Option. In addition, nothing contained in this Option shall be construed as imposing any liabilities on the Purchaser to purchase any securities or as a shareholder of the Company or LifeMap (other than upon exercise of this Option), whether such liabilities are asserted by the Company or LifeMap or by their respective creditors. Notwithstanding this Section, the Company shall provide the Purchaser with copies of such notices and other information given to the Common Stock holders of LifeMap generally, promptly after receipt thereof by the Company, unless the Company believes that such information is material, nonpublic information regarding the Company or LifeMap.

8. NOTICES. Any notice pursuant to this Agreement by the Purchaser to the Company shall be in writing and shall be delivered in person, or mailed first class, postage prepaid, or sent by air delivery service or by facsimile transmission (FAX) or email to the Company, at its office, Attention: Chief Financial Officer. The address of the principal office of the Company is 1301 Harbor Bay Parkway, Alameda, California 94502; FAX (510) 521-3389; email rpeabody@biotimemail.com. Any notice given pursuant to this Agreement by the Company to the Purchaser shall be in writing and shall be mailed first class, postage prepaid, or sent by air delivery service, or by facsimile transmission (FAX) or email or otherwise delivered to the Purchaser at the Purchaser's address shown on the signature page of this Option. Each party hereto may from time to time change the address to which notices to it are to be delivered or mailed hereunder by notice to the other party.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Option may only be amended by a written instrument signed by the Company and the Purchaser.

10. GOVERNING LAW; JURISDICTION. This Option shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Option shall be governed by, the internal laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of California. The Company and the Purchaser hereby irrevocably submit to the non-exclusive jurisdiction of the state and federal courts sitting in the City of New York and the County of Alameda and the United States District Court for the Northern District of California for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper.

11. CONSTRUCTION; HEADINGS. This Option shall be deemed to be jointly drafted by the Company and Purchaser and shall not be construed against any Person as the drafter hereof. The headings of this Option are for convenience of reference and shall not form part of, or affect the interpretation of, this Option.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares purchasable upon cancellation of Warrants in connection with the exercise of this Option, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Purchaser. If the Purchaser and the Company are unable to agree upon such determination or calculation of the Exercise Price or the LifeMap Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Purchaser, then the Company shall, within two (2) Business Days submit via facsimile (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Purchaser or (b) the disputed arithmetic calculation of the LifeMap Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Purchaser of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Option shall be cumulative and in addition to all other remedies available under this Option, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Purchaser to pursue actual damages for any failure by the Company to comply with the terms of this Option.

14. SEVERABILITY. If any provision of this Option is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Option so long as this Option as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

15. COMPANY'S REPRESENTATIONS AND WARRANTIES. The Company has the power and authority to execute and deliver this Option and to perform all of its obligations hereunder. This Option has been duly authorized, executed and delivered by the Company and is the valid and binding agreement of the Company, enforceable in accordance with its terms subject to: (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors; and (ii) general principles of equity. Neither the Company, nor any of its Affiliates, nor any person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause the offering of the Option or the LifeMap Shares to be integrated with prior offerings by the Company or LifeMap for purposes of registration of any of the LifeMap Shares under the 1933 Act or of any applicable shareholder approval provisions of the NYSE MKT. There is no lawsuit, arbitration proceeding, or administrative action or proceeding pending or threatened against the Company which questions the validity of this Option or any action taken or to be taken by the Company in connection with this Option or the transfer of the LifeMap Shares hereunder. The execution and delivery of this Option and consummation of the transactions contemplated by this Option (a) do not and will not violate any provisions of (i) any rule, regulation, statute, or law, (ii) the terms of any order, writ or decree of any court or judicial or regulatory authority or body, (iii) the Articles of Incorporation or bylaws of the Company, or (iv) the rules and regulations of the NYSE MKT applicable to the listing of the Company's common shares, (b) will not conflict with or result in a breach of any condition or provision or constitute a default under or pursuant to the terms of any Material Contract (as defined in the Securities Purchase Agreement), and (c) will not result in the creation or imposition of any lien, charge or encumbrance upon any of the LifeMap Shares (other than pursuant to this Option) or upon any of the assets or properties of the Company.

16. CERTAIN DEFINITIONS. For purposes of this Option, the following terms shall have the following meanings:

(a) "**1933 Act**" means the Securities Act of 1933, as amended.

(b) "**Affiliate**" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(c) "**Attribution Parties**" means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Purchaser's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Purchaser or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a "group" within the meaning of Section 13(d) of the Exchange Act and Rule 13d-5 thereunder, together with the Purchaser or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the Purchaser's and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Purchaser and all other Attribution Parties to the Maximum Percentage.

(d) "**Bloomberg**" means Bloomberg Financial Markets.

(e) "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) "**Closing Bid Price**" and "**Closing Sale Price**" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg. If the Company and the Purchaser are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(g) "**Common Stock**" means (i) the Common Stock, no par value per share, of LifeMap, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

(h) "**Eligible Market**" means the NYSE, the NYSE MKT, The NASDAQ Global Market, The NASDAQ Global Select Market, the NASDAQ Capital Market, or the OTC Bulletin Board.

(i) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

(j) "**Expiration Date**" has the meaning ascribed in Section 1, provided, that, if May \_\_, 2013 falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a "**Holiday**"), the next day that is not a Holiday shall apply.

(k) "**Person**" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(l) "**Principal Market**" means the principal Eligible Market on which the Common Stock trades.

(m) "**Trading Day**" means any day on which the Common Stock is traded on the Principal Market, provided that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time).

**[Signature Page Follows]**

**IN WITNESS WHEREOF**, the Company and Purchaser have caused this Option Agreement to be duly executed as of the Effective Date.

**BIOTIME, INC.**

By: \_\_\_\_\_  
Name:  
Title:

**PURCHASER**

\_\_\_\_\_  
By: \_\_\_\_\_  
Name:  
Title:

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**EXERCISE NOTICE**  
**TO BE EXECUTED BY THE REGISTERED PURCHASER TO EXERCISE THIS**  
**OPTION TO PURCHASE LIFEMAP COMMON STOCK**

**BIOTIME, INC.**

The undersigned Purchaser hereby exercises the right to purchase \_\_\_\_\_ shares of Common Stock ("**LifeMap Shares**") of LifeMap Sciences, Inc., a California corporation, held by BioTime, Inc. (the "**Company**"), pursuant to the attached Option Agreement and:

Check One:

\_\_\_ A. Tenders herewith payment of the Aggregate Option Exercise Price in full in the form of a bank wire transfer to the account of the Company in the amount of \$ \_\_\_\_\_;

or

\_\_\_ B. Hereby cancels that number of Warrants required to be cancelled in lieu of cash in a Cashless Exercise pursuant to Section 2(d) of the Option Agreement.

Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Option Agreement.

Date: \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Name of Registered Purchaser

By: \_\_\_\_\_

Name:

Title:

[NOTE: The above signature should correspond exactly with the name of the Purchaser in the Option Agreement]

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**ACKNOWLEDGMENT**

The Company hereby acknowledges this Exercise Notice and hereby directs [Transfer Agent] to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated \_\_\_\_\_ from the Company and acknowledged and agreed to by [Transfer Agent].

**BIOTIME, INC.**

By: \_\_\_\_\_

Name:

Title:

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## OPTION AGREEMENT

This Option Agreement ("Option") is entered into as of June 6, 2013 (the "**Effective Date**") by BioTime, Inc., a California corporation (the "**Company**"), and ALB Private Investments LLC (the "**Purchaser**") in connection that certain Stock and Warrant Purchase Agreement, dated June 3, 2013, between the Company and Purchaser (the "**Securities Purchase Agreement**").

1. GRANT OF OPTION.

(a) Option. The Company hereby grants to Purchaser the option (the "**Option**"), in lieu of exercising some or all of the Warrants to purchase shares of common stock of the Company issued to the Purchaser pursuant to the Securities Purchase Agreement dated as of even date herewith (the "**Warrants**" and the certificate representing such Warrants, the "**Warrant Certificate**"), to cancel each such unexercised Warrant and purchase from the Company, at the Exercise Price (as defined below) then in effect, one (1) share of Common Stock of LifeMap Sciences, Inc. ("**LifeMap**") owned by BioTime, subject to adjustment as provided herein (the "**LifeMap Shares**"), free of any liens and charges and preemptive or similar rights. The Option shall expire if not exercised on or before the earlier to occur of (a) 5:00 p.m. New York time on June 5, 2016 and (b) the date on which all of the Warrants (as defined below) shall have been exercised in full, or sold or transferred otherwise than in a sale or transfer described in Section 4(a) (the "**Expiration Date**").

(b) Minimum Exercise. This Option may be exercised by Purchaser in whole or in part; provided, however, that any partial exercise of this Option shall not be for less than the lower of (i) 10,000 LifeMap Shares and (ii) all of the remaining LifeMap Shares that are issuable as of the applicable date of determination upon the exercise of the Option held by the Purchaser pursuant to the terms hereof.

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## 2. EXERCISE OF OPTION

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(b) and Section 4), this Option may be exercised by the Purchaser at any time or times on or after the Effective Date, in whole or in part, subject to Section 1(b), by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the "**Exercise Notice**"), duly completed and executed by Purchaser, stating Purchaser's election to exercise this Option, the number of Warrants being cancelled upon exercise of this Option and the number of LifeMap Shares being purchased, and (ii) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of LifeMap Shares purchasable upon cancellation of one Warrant multiplied by the number of Warrants being cancelled (the "**Aggregate Option Exercise Price**") by wire transfer of immediately available funds, or, if the provisions of Section 2(d) are applicable, (B) by notifying the Company that the Option is being exercised pursuant to a Cashless Exercise (as defined in Section 2(d)). The Holder shall not be required to deliver the original Warrant Certificate in order to effect an exercise hereunder. However, once the Option has been exercised in full, following the final exercise thereof, the Holder shall promptly return the original Warrant Certificate to the Company for cancellation. Execution and delivery of the Exercise Notice with respect to less than all of the Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option). On or before the first (1<sup>st</sup>) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile an acknowledgment of confirmation of receipt of the Exercise Notice to the Purchaser and the transfer agent of the LifeMap Shares (the "**Transfer Agent**"), if any. On or before the third (3<sup>rd</sup>) Trading Day following the date on which the Company has received the Exercise Notice, so long as the Purchaser delivers Aggregate Option Exercise Price (or, if applicable, notice of a Cashless Exercise) on or prior to the second (2<sup>nd</sup>) Trading Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**") (provided that if the Aggregate Option Exercise Price has not been delivered by such date, the Share Delivery Date shall be one (1) Trading Day after the Aggregate Option Exercise Price is delivered), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program, credit such aggregate number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise to the Purchaser's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, or if there is no Transfer Agent, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in LifeMap's share in the name of the Purchaser or its designee, for the number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the transfer of LifeMap Shares to the Purchaser via DTC, if any. No fractional LifeMap Shares are to be issued upon the exercise of this Option, but rather the number of LifeMap Shares to be issued shall be rounded down to the nearest whole number and the Company shall refund in cash to Purchaser the portion of the Exercise Price allocable to the fraction of a LifeMap Share not issued. The Company shall pay any and all taxes which may be payable with respect to the transfer of LifeMap Shares to the Purchaser upon exercise of this Option.

(b) Exercise Price. "**Exercise Price**" means the price payable for the purchase of each LifeMap Share upon cancellation of a Warrant in connection with exercise of this Option, which shall initially be \$4.00, and shall be subject to adjustment as provided herein.

(c) Reissue of Warrant Certificate. Upon the exercise of this Option in part, and provided that Purchaser shall have delivered the Warrant Certificate(s) to the Company as permitted under Section 2(a), to the extent that Purchaser continues to hold any unexercised Warrants, the Company shall issue to Purchaser a replacement Warrant Certificate for the number of Warrants that remain unexercised after taking into account the partial exercise of the Option.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if the Common Stock is then traded on an Eligible Market and a registration statement under the 1933 Act permitting the resale of the LifeMap Shares is not in effect under the 1933 Act, the Purchaser may, in its sole discretion, exercise this Option in whole or in part by electing in lieu of paying the Aggregate Option Exercise Price in cash, to receive upon such exercise the "Net Number" of LifeMap Shares determined according to the following formula (a "**Cashless Exercise**"):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A= the total number of LifeMap Shares with respect to which this Option is then being exercised as stated in the Exercise Notice.

B= the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the date of the Exercise Notice.

C= the Exercise Price then in effect at the time of such exercise.

In such event, a number of Warrants equal to the Warrants that would be cancelled if such exercise was effected by paying the Exercise Price in cash shall be cancelled, and the number of Warrants remaining for exercise by Purchaser shall be reduced by the number of Warrants so cancelled, and execution and delivery of the Exercise Notice with respect to less than all of the LifeMap Shares purchasable pursuant to this Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option).

(e) Company's Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to transfer to the Purchaser, or cause LifeMap to issue, on or prior to the Share Delivery Date, a certificate for the number of LifeMap Shares to which the Purchaser is entitled and cause such LifeMap Shares to be registered on LifeMap's share register or to credit the Purchaser's balance account with DTC for such number of LifeMap Shares to which the Purchaser is entitled upon the Purchaser's exercise of this Option, as applicable, then, in addition to all other remedies available to the Purchaser, the Company (X) shall pay in cash to the Purchaser on each day after such third (3<sup>rd</sup>) Trading Day that the transfer of such LifeMap Shares is not timely effected an amount equal to 1.5% of the product of (A) the sum of the number of LifeMap Shares not transferred to the Purchaser on a timely basis and to which the Purchaser is entitled and (B) the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the last possible date which the Company could have transferred such LifeMap Shares to the Purchaser without violating Section 2(a), or if the LifeMap Shares are then not traded on an Eligible Market, the Exercise Price, and (Y) the Purchaser, upon written notice to the Company, may void its Exercise Notice with respect to, and retain or have returned, as the case may be, any Warrants cancelled in connection with such voided exercise; provided that the voiding of an exercise shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 2(e) or otherwise. In addition to the foregoing, if on or prior to the Share Delivery Date, the Company shall fail to transfer, or cause LifeMap to issue, a certificate to the Purchaser and cause the registration of such LifeMap Shares on LifeMap's share register or credit the Purchaser's balance account with DTC for the number of shares of Common Stock to which the Purchaser is entitled upon the Purchaser's exercise hereunder or pursuant to the Company's obligation pursuant to clause (ii) below, as applicable, and if on or after such Trading Day the Purchaser purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Purchaser of shares of Common Stock issuable upon such exercise that the Purchaser anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, within three (3) Trading Days after the Purchaser's request and in the Purchaser's discretion, either (i) pay cash to the Purchaser in an amount equal to the Purchaser's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to transfer LifeMap Shares) or credit such Purchaser's balance account with DTC for such LifeMap Shares shall terminate, or (ii) promptly honor its obligation to deliver to the Purchaser a certificate or certificates representing such shares of Common Stock or credit such Purchaser's balance account with DTC and pay cash to the Purchaser in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the Closing Bid Price on the date of exercise. Nothing shall limit the Purchaser's right to pursue a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing LifeMap Shares (or to electronically deliver such LifeMap Shares) upon the exercise of this Option as required pursuant to the terms hereof.

(f) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares, the Company shall promptly transfer to the Purchaser the number of LifeMap Shares that are not disputed and resolve such dispute in accordance with Section 12.

3. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF LIFEMAP SHARES. The Exercise Price and the number of LifeMap Shares purchasable hereunder shall be adjusted from time to time as follows:

(a) Prorata Adjustments. If LifeMap, at any time after the Effective Date, shall (A) pay a dividend in Common Stock or make a distribution in Common Stock, (B) subdivide its outstanding Common Stock, (C) combine its outstanding Common Stock into a smaller number of shares of Common Stock or (D) reclassify or change (including a change to the right to receive, or a change into, as the case may be (other than with respect to a merger or consolidation pursuant to the exercise of appraisal rights), shares of stock, other securities, property, cash or any combination thereof) its Common Stock (including any such reclassification or change in connection with a consolidation or merger in which LifeMap is the surviving corporation), the number of LifeMap Shares purchasable hereunder upon cancellation of each Warrant in connection with the exercise of this Option immediately prior thereto shall be adjusted so that the Purchaser shall be entitled to receive from the Company the kind and number of shares of Common Stock or other securities of LifeMap or other property which the Purchaser would have owned or have been entitled to receive after the happening of any of the events described above, had such Warrant been cancelled in connection with the exercise of this Option immediately prior to the happening of such event or any record date with respect thereto. An adjustment made pursuant to this paragraph shall become effective immediately after the effective date of such event retroactive to the record date, if any, for such event.

(b) Options, Warrants and Rights. If LifeMap at any time after the Effective Date, shall issue rights, options or warrants to all holders of its outstanding Common Stock, without any charge to such holders, entitling them to subscribe for or purchase Common Stock at a price per share which is lower at the record date mentioned below than the then Current Market Price (as defined in paragraph (d) below) per share of the Common Stock, the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of additional shares of Common Stock offered for subscription or purchase in connection with such rights, options or warrants, and of which the denominator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of shares which the aggregate exercise price of the total number of shares of Common Stock issuable upon exercise of such rights, options or warrants would purchase at the Current Market Price per share of the Common Stock (as determined pursuant to paragraph (d) below) at such record date. Such adjustment shall be made whenever such rights, options or warrants are issued, and shall become effective immediately after the record date for the determination of stockholders entitled to receive such rights, options or warrants

(c) Distribution of Indebtedness or Assets. If LifeMap at any time after the Effective Date, shall distribute to all holders of its Common Stock (including any distribution made in connection with a merger in which LifeMap is the surviving corporation) evidences of its indebtedness or assets (excluding cash, dividends or distributions payable out of consolidated earnings or earned surplus and dividends or distributions referred to in paragraph (a) above) or rights, options or warrants, or convertible or exchangeable securities containing the right to subscribe for or purchase Common Stock (excluding those referred to in paragraph (b) above), then in each case the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the then Current Market Price per share of Common Stock (as determined pursuant to paragraph (d) below) on the date of such distribution, and of which the denominator shall be the then Current Market Price per share of Common Stock, less the then fair value (as determined in good faith by the Board of Directors of the Company whose determination shall be conclusive) of the portion of the assets or evidences of indebtedness so distributed or of such subscription rights, options or warrants, or of such convertible or exchangeable securities applicable to one LifeMap Share. Such adjustment shall be made whenever any such distribution is made, and shall become effective on the date of distribution retroactive to the record date for the determination of shareholders entitled to receive such distribution.

(d) Current Market Price. For the purpose of any computation under paragraphs (b) and (c) of this Section, the "Current Market Price" per share of Common Stock at any date shall be the average of the daily Closing Sale Prices for the 20 consecutive Trading Days ending one Trading Day prior to the date of such computation. If the Current Market Price of the Common Stock cannot be so determined, the Board of Directors of the Company shall reasonably determine in good faith the Current Market Price on the basis of such quotations or other sales information as is available.

(e) Minimum Adjustment. No adjustment pursuant to paragraphs (b) and (c) of this Section 3 in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be required unless such adjustment would require an increase or decrease of at least one percent (1%) in the number of LifeMap Shares purchasable upon cancellation of such Warrant; provided, however, that any adjustments which by reason of this paragraph (e) are not required to be made shall be carried forward and taken into account in the determination of any subsequent adjustment. All calculations shall be made with respect to the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option, to the nearest tenth of a share and with respect to the Exercise Price payable hereunder, to the nearest whole cent.

(f) Adjustment of Exercise Price. Whenever the number of LifeMap Shares purchasable upon the exercise of this Option is adjusted, as herein provided, the Exercise Price payable upon exercise of this Option shall be adjusted by multiplying such Exercise Price immediately prior to such adjustment by a fraction, of which the numerator shall be the number of LifeMap Shares purchasable upon the exercise of this Option immediately prior to such adjustment, and of which the denominator shall be the number of LifeMap Shares purchasable immediately thereafter.

(g) Distribution in Lieu of Adjustment. No adjustment in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option need be made under paragraphs (b) and (c) of this Section 3 if the Company delivers to the Purchaser the rights options, warrants, or convertible or exchangeable securities, or evidences of indebtedness or assets referred to in those paragraphs which the Purchaser would have been entitled to receive had this Option been exercised in full prior to the happening of such event or the record date with respect thereto. No adjustment need be made for a change in the par value of the LifeMap Shares.

(h) Notice of Adjustment. Whenever the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or the Exercise Price of such LifeMap Shares is adjusted, as herein provided, the Company shall promptly, in any event within ten (10) days send to the Purchaser notice of such adjustment or adjustments. Such notice shall set forth the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option and the Exercise Price of such LifeMap Shares after such adjustment, setting forth a brief statement of the facts requiring such adjustment and setting forth the computation by which such adjustment was made.

(i) No Adjustment for Dividends. Except as provided in this Section 3, no adjustment in respect of any dividends shall be made during the term of this Option or upon the exercise of this Option.

(j) Readjustment of Number of LifeMap Shares and Exercise Price; Certain Limitations. If an adjustment of the number of LifeMap Shares purchasable upon cancellation of each Warrant or the Exercise Price has been made as a result of the issuance of rights, options or warrants as provided in paragraph (b), or rights, options or warrants or convertible or exchangeable securities as provided in paragraph (c), of this Section 3, upon the expiration of any such rights, options, or warrants, or conversion or exchange privileges under convertible or exchangeable securities, without exercise thereof, the Exercise Price and the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall, upon such expiration, be readjusted and shall thereafter be such as it would have been had it been originally adjusted (or had the original adjustment not been required, as the case may be) as if (A) the only shares of Common Stock so issued were the shares of Common Stock, if any, actually issued or sold upon the exercise of such rights, options, warrants, or conversion or exchange rights and (B) such shares of Common Stock, if any, were issued or sold for the consideration actually received by LifeMap upon such exercise plus the aggregate consideration, if any, actually received by LifeMap for the issuance, sale or grant of all such rights, options, warrants, or conversion or exchange rights whether or not exercised. Except as provided in this paragraph, no reduction in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or increase in the Exercise Price shall be made as a result of the issuance or distribution of rights, options or warrants, or convertible or exchangeable securities as described in paragraphs (b) or (c) of this Section 3.

#### 4. RESTRICTIONS ON TRANSFER.

(a) Transfer. This Option is personal to the Purchaser and may not be sold, transferred or assigned, except (i) to a successor in interest of the Purchaser as a result of any consolidation of the Purchaser with or merger of the Purchaser into another Person, (ii) to another Purchaser (as defined in the Securities Purchase Agreement) or (iii) to another Person as part of a sale of all or substantially all the property of the Purchaser to such other Person.

(b) Restrictions on Transfer of LifeMap Shares.

(i) Any LifeMap Shares purchased by Purchaser upon the exercise of this Option, may not be sold, pledged, hypothecated, transferred or assigned, in whole or in part, unless (A) a registration statement under the 1933 Act and under any applicable state securities laws is effective therefor or (B) an exemption from such registration is then available and an opinion of counsel, reasonably acceptable to LifeMap and the Transfer Agent, if any, has been rendered stating that such sale, pledge, hypothecation, transfer or assignment will not violate the 1933 Act. Notwithstanding anything to the contrary contained herein (x) the LifeMap Shares may be pledged in connection with a bona fide margin account or other loan or financing arrangement secured by the securities and no legal opinion shall be required therefor and (y) no representation, warranty, covenant or opinion shall be required for the sale, pledge, hypothecation, transfer or assignment of any LifeMap Shares if a registration statement with respect to the resale of such LifeMap Shares is effective at the time of any such sale, pledge, hypothecation, transfer or assignment.

(ii) As a condition precedent to the registration of transfer of any certificates representing LifeMap Shares upon the exercise of this Option or transfer of LifeMap Shares, the Company and LifeMap shall be entitled to obtain a letter or other instrument from the Purchaser containing such covenants, representations or warranties by such Purchaser similar to those contained in this Section 4 as reasonably deemed necessary by the Company or LifeMap to effect compliance by the Company or LifeMap with the requirements of the 1933 Act and any other applicable federal and/or state securities laws.

(iii) Any sale, pledge, hypothecation, transfer, or assignment of this Option or LifeMap Shares in violation of the foregoing restrictions shall be deemed null and void and of no binding effect.

(iv) The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares not made pursuant to registration under the 1933 Act and applicable state securities laws, or pursuant to an available exemption from registration under the 1933 Act and applicable state securities laws.

(v) The LifeMap Shares shall bear an appropriate legend, conspicuously disclosing the restrictions on transfer, under this Section 4, until the same are registered for sale under the 1933 Act or are transferred in a transaction exempt from registration under the 1933 Act entitling the transferee to receive securities that are not deemed to be "restricted securities" as such term is defined in Rule 144 under the 1933 Act. The Company agrees that upon the sale of LifeMap Shares pursuant to a registration statement or an exemption entitling the transferee to receive securities that are not deemed to be "restricted securities," or at such time as registration under the 1933 Act shall no longer be required, upon the presentation of the certificates containing such a legend to the transfer agent or warrant agent, if any, it will request removal of such legend; provided, that unless the request for removal of the legend is in connection with a sale registered under the 1933 Act, the Purchaser shall have provided an opinion of counsel, acceptable to the Company and the Transfer Agent to the effect that such legend may be removed in compliance with the 1933 Act.

(c) Investment Representations. Each Purchaser makes the following representations, severally and not jointly and severally, in connection with its acquisition of this Option and any LifeMap Shares upon the exercise of this Option:

(i) Purchaser has made such investigation of LifeMap as Purchaser deemed appropriate for determining to acquire (and thereby make an investment in) this Option and LifeMap Shares, and in making such investigation Purchaser has had access to such financial and other information concerning LifeMap as Purchaser requested. Purchaser is relying on the information communicated to Purchaser in writing by LifeMap or the Company. Purchaser has not relied on any statement or representations inconsistent with those communicated to Purchaser in writing by LifeMap or the Company. Purchaser has had a reasonable opportunity to ask questions of and receive answers from the executive officers of LifeMap and the Company concerning LifeMap, and to obtain additional information, to the extent possessed or obtainable by LifeMap or the Company without unreasonable effort or expense, necessary to verify the information communicated or provided to Purchaser. All such questions have been answered to Purchaser's satisfaction.



(ii) Purchaser is acquiring this Option and upon exercise of this Option will purchase LifeMap Shares solely for Purchaser's own account, and Purchaser has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of the LifeMap Shares or this Option; provided, that this representation and warranty shall not prohibit Purchaser from selling LifeMap Shares in the ordinary course of business pursuant to a registration statement under the 1933 Act or otherwise in compliance with the 1933 Act and applicable state securities or "blue sky" laws.

(iii) Purchaser is an "accredited investor" as defined in Rule 501 under the 1933 Act.

(iv) Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in this Option and LifeMap Shares, and has so evaluated the merits and risks of such investment. Such Purchaser is able to bear the economic risk of an investment in this Option and LifeMap Shares and, at the present time, is able to afford a complete loss of such investment.

5. **REGISTRATION RIGHTS.** The Company hereby covenants and agrees that in the event the Company receives any registration rights from LifeMap in respect of any shares of Common Stock owned by the Company, simultaneously with the exercise of any such registration rights at any time that this Option remains exercisable in whole or in part, the Company shall cause LifeMap to register all of the LifeMap Shares issuable to the Purchaser as of the applicable date of determination pursuant to the terms of this Option. The Company acknowledges and agrees that prior to excluding any LifeMap Shares from any registration statement, it shall first exclude all other shares of Common Stock owned by the Company other than any shares of Common Stock that are subject to an option provided to another Purchaser (as defined in the Securities Purchase Agreement) which shall be subject to exclusion on a pro rata basis with all other Purchasers (as defined in the Securities Purchase Agreement). The Company shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, including, without limitation, any assignment of any registration rights with respect to the Common Stock purchasable pursuant to this Option granted to the Company under any registration rights agreement by LifeMap and the Company or under any registration statement, as Purchaser may reasonably request in order to carry out the intent and accomplish the purposes of this Section 5.

6. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Incorporation, Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Option, and will at all times in good faith carry out all the provisions of this Option and take all action as may be required to protect the rights of the Purchaser. Without limiting the generality of the foregoing, the Company shall continue to hold a sufficient number of LifeMap Shares to permit Purchaser to exercise this Option in full. The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares in violation of the immediately preceding sentence.

7. PURCHASER NOT DEEMED A LIFEMAP SHAREHOLDER. The Purchaser, solely in such Person's capacity as the holder of this Option, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of LifeMap for any purpose, nor shall anything contained in this Option be construed to confer upon the Purchaser, solely in such Person's capacity as the holder of this Option, any of the rights of a shareholder of LifeMap or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the purchase of the LifeMap Shares through the due exercise of this Option. In addition, nothing contained in this Option shall be construed as imposing any liabilities on the Purchaser to purchase any securities or as a shareholder of the Company or LifeMap (other than upon exercise of this Option), whether such liabilities are asserted by the Company or LifeMap or by their respective creditors. Notwithstanding this Section, the Company shall provide the Purchaser with copies of such notices and other information given to the Common Stock holders of LifeMap generally, promptly after receipt thereof by the Company, unless the Company believes that such information is material, nonpublic information regarding the Company or LifeMap.

8. NOTICES. Any notice pursuant to this Agreement by the Purchaser to the Company shall be in writing and shall be delivered in person, or mailed first class, postage prepaid, or sent by air delivery service or by facsimile transmission (FAX) or email to the Company, at its office, Attention: Chief Financial Officer. The address of the principal office of the Company is 1301 Harbor Bay Parkway, Alameda, California 94502; FAX (510) 521-3389; email rpeabody@biotimemail.com. Any notice given pursuant to this Agreement by the Company to the Purchaser shall be in writing and shall be mailed first class, postage prepaid, or sent by air delivery service, or by facsimile transmission (FAX) or email or otherwise delivered to the Purchaser at the Purchaser's address shown on the signature page of this Option. Each party hereto may from time to time change the address to which notices to it are to be delivered or mailed hereunder by notice to the other party.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Option may only be amended by a written instrument signed by the Company and the Purchaser.

10. GOVERNING LAW; JURISDICTION. This Option shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Option shall be governed by, the internal laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of California. The Company and the Purchaser hereby irrevocably submit to the non-exclusive jurisdiction of the state and federal courts sitting in the City of New York and the County of Alameda and the United States District Court for the Northern District of California for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper.

11. CONSTRUCTION; HEADINGS. This Option shall be deemed to be jointly drafted by the Company and Purchaser and shall not be construed against any Person as the drafter hereof. The headings of this Option are for convenience of reference and shall not form part of, or affect the interpretation of, this Option.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares purchasable upon cancellation of Warrants in connection with the exercise of this Option, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Purchaser. If the Purchaser and the Company are unable to agree upon such determination or calculation of the Exercise Price or the LifeMap Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Purchaser, then the Company shall, within two (2) Business Days submit via facsimile (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Purchaser or (b) the disputed arithmetic calculation of the LifeMap Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Purchaser of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Option shall be cumulative and in addition to all other remedies available under this Option, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Purchaser to pursue actual damages for any failure by the Company to comply with the terms of this Option.

14. SEVERABILITY. If any provision of this Option is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Option so long as this Option as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

15. COMPANY'S REPRESENTATIONS AND WARRANTIES. The Company has the power and authority to execute and deliver this Option and to perform all of its obligations hereunder. This Option has been duly authorized, executed and delivered by the Company and is the valid and binding agreement of the Company, enforceable in accordance with its terms subject to: (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors; and (ii) general principles of equity. Neither the Company, nor any of its Affiliates, nor any person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause the offering of the Option or the LifeMap Shares to be integrated with prior offerings by the Company or LifeMap for purposes of registration of any of the LifeMap Shares under the 1933 Act or of any applicable shareholder approval provisions of the NYSE MKT. There is no lawsuit, arbitration proceeding, or administrative action or proceeding pending or threatened against the Company which questions the validity of this Option or any action taken or to be taken by the Company in connection with this Option or the transfer of the LifeMap Shares hereunder. The execution and delivery of this Option and consummation of the transactions contemplated by this Option (a) do not and will not violate any provisions of (i) any rule, regulation, statute, or law, (ii) the terms of any order, writ or decree of any court or judicial or regulatory authority or body, (iii) the Articles of Incorporation or bylaws of the Company, or (iv) the rules and regulations of the NYSE MKT applicable to the listing of the Company's common shares, (b) will not conflict with or result in a breach of any condition or provision or constitute a default under or pursuant to the terms of any Material Contract (as defined in the Securities Purchase Agreement), and (c) will not result in the creation or imposition of any lien, charge or encumbrance upon any of the LifeMap Shares (other than pursuant to this Option) or upon any of the assets or properties of the Company.

16. CERTAIN DEFINITIONS. For purposes of this Option, the following terms shall have the following meanings:

(a) "**1933 Act**" means the Securities Act of 1933, as amended.

(b) "**Affiliate**" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(c) "**Attribution Parties**" means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Purchaser's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Purchaser or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a "group" within the meaning of Section 13(d) of the Exchange Act and Rule 13d-5 thereunder, together with the Purchaser or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the Purchaser's and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Purchaser and all other Attribution Parties to the Maximum Percentage.

(d) "**Bloomberg**" means Bloomberg Financial Markets.

(e) "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) "**Closing Bid Price**" and "**Closing Sale Price**" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg. If the Company and the Purchaser are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(g) "**Common Stock**" means (i) the Common Stock, no par value per share, of LifeMap, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

(h) "**Eligible Market**" means the NYSE, the NYSE MKT, The NASDAQ Global Market, The NASDAQ Global Select Market, the NASDAQ Capital Market, or the OTC Bulletin Board.

(i) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

(j) "**Expiration Date**" has the meaning ascribed in Section 1, provided, that, if June 5, 2016 falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a "**Holiday**"), the next day that is not a Holiday shall apply.

(k) **"Person"** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(l) **"Principal Market"** means the principal Eligible Market on which the Common Stock trades.

(m) **"Trading Day"** means any day on which the Common Stock is traded on the Principal Market, provided that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time).

**[Signature Page Follows]**

IN WITNESS WHEREOF, the Company and Purchaser have caused this Option Agreement to be duly executed as of the Effective Date.

**BIOTIME, INC.**

By: /s/ Robert W. Peabody

Name: Robert W. Peabody

Title: Sr. VP

**PURCHASER**

ALB Private Investments LLC

By: /s/ Francis A. Mlynarczyk, Jr.

Name: Francis A. Mlynarczyk, Jr.

Title: Manager

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## EXERCISE NOTICE

**TO BE EXECUTED BY THE REGISTERED PURCHASER TO EXERCISE THIS  
OPTION TO PURCHASE LIFEMAP COMMON STOCK**

**BIOTIME, INC.**

The undersigned Purchaser hereby exercises the right to purchase \_\_\_\_\_ shares of Common Stock ("**LifeMap Shares**") of LifeMap Sciences, Inc., a California corporation, held by BioTime, Inc. (the "**Company**"), pursuant to the attached Option Agreement and:

Check One:

\_\_\_ A. Tenders herewith payment of the Aggregate Option Exercise Price in full in the form of a bank wire transfer to the account of the Company in the amount of \$ \_\_\_\_\_;

or

\_\_\_ B. Hereby cancels that number of Warrants required to be cancelled in lieu of cash in a Cashless Exercise pursuant to Section 2(d) of the Option Agreement.

Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Option Agreement.

Date: \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Name of Registered Purchaser

By: \_\_\_\_\_

Name:

Title:

[NOTE: The above signature should correspond exactly with the name of the Purchaser in the Option Agreement]

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**ACKNOWLEDGMENT**

The Company hereby acknowledges this Exercise Notice and hereby directs [Transfer Agent] to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated from the Company and acknowledged and agreed to by [Transfer Agent].

**BIOTIME, INC.**

By: \_\_\_\_\_  
Name:  
Title:

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## OPTION AGREEMENT

This Option Agreement ("Option") is entered into as of June 6, 2013 (the "**Effective Date**") by BioTime, Inc., a California corporation (the "**Company**"), and Delaware Street Capital Master Fund, L.P. (the "**Purchaser**") in connection that certain Stock and Warrant Purchase Agreement, dated June 3, 2013, between the Company and Purchaser (the "**Securities Purchase Agreement**").

### 1. GRANT OF OPTION.

(a) Option. The Company hereby grants to Purchaser the option (the "**Option**"), in lieu of exercising some or all of the Warrants to purchase shares of common stock of the Company issued to the Purchaser pursuant to the Securities Purchase Agreement dated as of even date herewith (the "**Warrants**" and the certificate representing such Warrants, the "**Warrant Certificate**"), to cancel each such unexercised Warrant and purchase from the Company, at the Exercise Price (as defined below) then in effect, one (1) share of Common Stock of LifeMap Sciences, Inc. ("**LifeMap**") owned by BioTime, subject to adjustment as provided herein (the "**LifeMap Shares**"), free of any liens and charges and preemptive or similar rights. The Option shall expire if not exercised on or before the earlier to occur of (a) 5:00 p.m. New York time on June 5, 2016 and (b) the date on which all of the Warrants (as defined below) shall have been exercised in full, or sold or transferred otherwise than in a sale or transfer described in Section 4(a) (the "**Expiration Date**").

(b) Minimum Exercise. This Option may be exercised by Purchaser in whole or in part; provided, however, that any partial exercise of this Option shall not be for less than the lower of (i) 10,000 LifeMap Shares and (ii) all of the remaining LifeMap Shares that are issuable as of the applicable date of determination upon the exercise of the Option held by the Purchaser pursuant to the terms hereof.

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## 2. EXERCISE OF OPTION

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(b) and Section 4), this Option may be exercised by the Purchaser at any time or times on or after the Effective Date, in whole or in part, subject to Section 1(b), by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the "**Exercise Notice**"), duly completed and executed by Purchaser, stating Purchaser's election to exercise this Option, the number of Warrants being cancelled upon exercise of this Option and the number of LifeMap Shares being purchased, and (ii) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of LifeMap Shares purchasable upon cancellation of one Warrant multiplied by the number of Warrants being cancelled (the "**Aggregate Option Exercise Price**") by wire transfer of immediately available funds, or, if the provisions of Section 2(d) are applicable, (B) by notifying the Company that the Option is being exercised pursuant to a Cashless Exercise (as defined in Section 2(d)). The Holder shall not be required to deliver the original Warrant Certificate in order to effect an exercise hereunder. However, once the Option has been exercised in full, following the final exercise thereof, the Holder shall promptly return the original Warrant Certificate to the Company for cancellation. Execution and delivery of the Exercise Notice with respect to less than all of the Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option). On or before the first (1<sup>st</sup>) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile an acknowledgment of confirmation of receipt of the Exercise Notice to the Purchaser and the transfer agent of the LifeMap Shares (the "**Transfer Agent**"), if any. On or before the third (3<sup>rd</sup>) Trading Day following the date on which the Company has received the Exercise Notice, so long as the Purchaser delivers Aggregate Option Exercise Price (or, if applicable, notice of a Cashless Exercise) on or prior to the second (2<sup>nd</sup>) Trading Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**") (provided that if the Aggregate Option Exercise Price has not been delivered by such date, the Share Delivery Date shall be one (1) Trading Day after the Aggregate Option Exercise Price is delivered), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program, credit such aggregate number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise to the Purchaser's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, or if there is no Transfer Agent, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in LifeMap's share in the name of the Purchaser or its designee, for the number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the transfer of LifeMap Shares to the Purchaser via DTC, if any. No fractional LifeMap Shares are to be issued upon the exercise of this Option, but rather the number of LifeMap Shares to be issued shall be rounded down to the nearest whole number and the Company shall refund in cash to Purchaser the portion of the Exercise Price allocable to the fraction of a LifeMap Share not issued. The Company shall pay any and all taxes which may be payable with respect to the transfer of LifeMap Shares to the Purchaser upon exercise of this Option.

(b) Exercise Price. "**Exercise Price**" means the price payable for the purchase of each LifeMap Share upon cancellation of a Warrant in connection with exercise of this Option, which shall initially be \$4.00, and shall be subject to adjustment as provided herein.

(c) Reissue of Warrant Certificate. Upon the exercise of this Option in part, and provided that Purchaser shall have delivered the Warrant Certificate(s) to the Company as permitted under Section 2(a), to the extent that Purchaser continues to hold any unexercised Warrants, the Company shall issue to Purchaser a replacement Warrant Certificate for the number of Warrants that remain unexercised after taking into account the partial exercise of the Option.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if the Common Stock is then traded on an Eligible Market and a registration statement under the 1933 Act permitting the resale of the LifeMap Shares is not in effect under the 1933 Act, the Purchaser may, in its sole discretion, exercise this Option in whole or in part by electing in lieu of paying the Aggregate Option Exercise Price in cash, to receive upon such exercise the "Net Number" of LifeMap Shares determined according to the following formula (a "**Cashless Exercise**"):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A= the total number of LifeMap Shares with respect to which this Option is then being exercised as stated in the Exercise Notice.

B= the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the date of the Exercise Notice.

C= the Exercise Price then in effect at the time of such exercise.

In such event, a number of Warrants equal to the Warrants that would be cancelled if such exercise was effected by paying the Exercise Price in cash shall be cancelled, and the number of Warrants remaining for exercise by Purchaser shall be reduced by the number of Warrants so cancelled, and execution and delivery of the Exercise Notice with respect to less than all of the LifeMap Shares purchasable pursuant to this Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option).

(e) Company's Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to transfer to the Purchaser, or cause LifeMap to issue, on or prior to the Share Delivery Date, a certificate for the number of LifeMap Shares to which the Purchaser is entitled and cause such LifeMap Shares to be registered on LifeMap's share register or to credit the Purchaser's balance account with DTC for such number of LifeMap Shares to which the Purchaser is entitled upon the Purchaser's exercise of this Option, as applicable, then, in addition to all other remedies available to the Purchaser, the Company (X) shall pay in cash to the Purchaser on each day after such third (3<sup>rd</sup>) Trading Day that the transfer of such LifeMap Shares is not timely effected an amount equal to 1.5% of the product of (A) the sum of the number of LifeMap Shares not transferred to the Purchaser on a timely basis and to which the Purchaser is entitled and (B) the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the last possible date which the Company could have transferred such LifeMap Shares to the Purchaser without violating Section 2(a), or if the LifeMap Shares are then not traded on an Eligible Market, the Exercise Price, and (Y) the Purchaser, upon written notice to the Company, may void its Exercise Notice with respect to, and retain or have returned, as the case may be, any Warrants cancelled in connection with such voided exercise; provided that the voiding of an exercise shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 2(e) or otherwise. In addition to the foregoing, if on or prior to the Share Delivery Date, the Company shall fail to transfer, or cause LifeMap to issue, a certificate to the Purchaser and cause the registration of such LifeMap Shares on LifeMap's share register or credit the Purchaser's balance account with DTC for the number of shares of Common Stock to which the Purchaser is entitled upon the Purchaser's exercise hereunder or pursuant to the Company's obligation pursuant to clause (ii) below, as applicable, and if on or after such Trading Day the Purchaser purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Purchaser of shares of Common Stock issuable upon such exercise that the Purchaser anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, within three (3) Trading Days after the Purchaser's request and in the Purchaser's discretion, either (i) pay cash to the Purchaser in an amount equal to the Purchaser's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to transfer LifeMap Shares) or credit such Purchaser's balance account with DTC for such LifeMap Shares shall terminate, or (ii) promptly honor its obligation to deliver to the Purchaser a certificate or certificates representing such shares of Common Stock or credit such Purchaser's balance account with DTC and pay cash to the Purchaser in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the Closing Bid Price on the date of exercise. Nothing shall limit the Purchaser's right to pursue a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing LifeMap Shares (or to electronically deliver such LifeMap Shares) upon the exercise of this Option as required pursuant to the terms hereof.

(f) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares, the Company shall promptly transfer to the Purchaser the number of LifeMap Shares that are not disputed and resolve such dispute in accordance with Section 12.

3. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF LIFEMAP SHARES. The Exercise Price and the number of LifeMap Shares purchasable hereunder shall be adjusted from time to time as follows:

(a) Prorata Adjustments. If LifeMap, at any time after the Effective Date, shall (A) pay a dividend in Common Stock or make a distribution in Common Stock, (B) subdivide its outstanding Common Stock, (C) combine its outstanding Common Stock into a smaller number of shares of Common Stock or (D) reclassify or change (including a change to the right to receive, or a change into, as the case may be (other than with respect to a merger or consolidation pursuant to the exercise of appraisal rights), shares of stock, other securities, property, cash or any combination thereof) its Common Stock (including any such reclassification or change in connection with a consolidation or merger in which LifeMap is the surviving corporation), the number of LifeMap Shares purchasable hereunder upon cancellation of each Warrant in connection with the exercise of this Option immediately prior thereto shall be adjusted so that the Purchaser shall be entitled to receive from the Company the kind and number of shares of Common Stock or other securities of LifeMap or other property which the Purchaser would have owned or have been entitled to receive after the happening of any of the events described above, had such Warrant been cancelled in connection with the exercise of this Option immediately prior to the happening of such event or any record date with respect thereto. An adjustment made pursuant to this paragraph shall become effective immediately after the effective date of such event retroactive to the record date, if any, for such event.

(b) Options, Warrants and Rights. If LifeMap at any time after the Effective Date, shall issue rights, options or warrants to all holders of its outstanding Common Stock, without any charge to such holders, entitling them to subscribe for or purchase Common Stock at a price per share which is lower at the record date mentioned below than the then Current Market Price (as defined in paragraph (d) below) per share of the Common Stock, the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of additional shares of Common Stock offered for subscription or purchase in connection with such rights, options or warrants, and of which the denominator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of shares which the aggregate exercise price of the total number of shares of Common Stock issuable upon exercise of such rights, options or warrants would purchase at the Current Market Price per share of the Common Stock (as determined pursuant to paragraph (d) below) at such record date. Such adjustment shall be made whenever such rights, options or warrants are issued, and shall become effective immediately after the record date for the determination of stockholders entitled to receive such rights, options or warrants

(c) Distribution of Indebtedness or Assets. If LifeMap at any time after the Effective Date, shall distribute to all holders of its Common Stock (including any distribution made in connection with a merger in which LifeMap is the surviving corporation) evidences of its indebtedness or assets (excluding cash, dividends or distributions payable out of consolidated earnings or earned surplus and dividends or distributions referred to in paragraph (a) above) or rights, options or warrants, or convertible or exchangeable securities containing the right to subscribe for or purchase Common Stock (excluding those referred to in paragraph (b) above), then in each case the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the then Current Market Price per share of Common Stock (as determined pursuant to paragraph (d) below) on the date of such distribution, and of which the denominator shall be the then Current Market Price per share of Common Stock, less the then fair value (as determined in good faith by the Board of Directors of the Company whose determination shall be conclusive) of the portion of the assets or evidences of indebtedness so distributed or of such subscription rights, options or warrants, or of such convertible or exchangeable securities applicable to one LifeMap Share. Such adjustment shall be made whenever any such distribution is made, and shall become effective on the date of distribution retroactive to the record date for the determination of shareholders entitled to receive such distribution.

(d) Current Market Price. For the purpose of any computation under paragraphs (b) and (c) of this Section, the "Current Market Price" per share of Common Stock at any date shall be the average of the daily Closing Sale Prices for the 20 consecutive Trading Days ending one Trading Day prior to the date of such computation. If the Current Market Price of the Common Stock cannot be so determined, the Board of Directors of the Company shall reasonably determine in good faith the Current Market Price on the basis of such quotations or other sales information as is available.

(e) Minimum Adjustment. No adjustment pursuant to paragraphs (b) and (c) of this Section 3 in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be required unless such adjustment would require an increase or decrease of at least one percent (1%) in the number of LifeMap Shares purchasable upon cancellation of such Warrant; provided, however, that any adjustments which by reason of this paragraph (e) are not required to be made shall be carried forward and taken into account in the determination of any subsequent adjustment. All calculations shall be made with respect to the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option, to the nearest tenth of a share and with respect to the Exercise Price payable hereunder, to the nearest whole cent.

(f) Adjustment of Exercise Price. Whenever the number of LifeMap Shares purchasable upon the exercise of this Option is adjusted, as herein provided, the Exercise Price payable upon exercise of this Option shall be adjusted by multiplying such Exercise Price immediately prior to such adjustment by a fraction, of which the numerator shall be the number of LifeMap Shares purchasable upon the exercise of this Option immediately prior to such adjustment, and of which the denominator shall be the number of LifeMap Shares purchasable immediately thereafter.

(g) Distribution in Lieu of Adjustment. No adjustment in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option need be made under paragraphs (b) and (c) of this Section 3 if the Company delivers to the Purchaser the rights options, warrants, or convertible or exchangeable securities, or evidences of indebtedness or assets referred to in those paragraphs which the Purchaser would have been entitled to receive had this Option been exercised in full prior to the happening of such event or the record date with respect thereto. No adjustment need be made for a change in the par value of the LifeMap Shares.

(h) Notice of Adjustment. Whenever the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or the Exercise Price of such LifeMap Shares is adjusted, as herein provided, the Company shall promptly, in any event within ten (10) days send to the Purchaser notice of such adjustment or adjustments. Such notice shall set forth the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option and the Exercise Price of such LifeMap Shares after such adjustment, setting forth a brief statement of the facts requiring such adjustment and setting forth the computation by which such adjustment was made.

(i) No Adjustment for Dividends. Except as provided in this Section 3, no adjustment in respect of any dividends shall be made during the term of this Option or upon the exercise of this Option.

(j) Readjustment of Number of LifeMap Shares and Exercise Price; Certain Limitations. If an adjustment of the number of LifeMap Shares purchasable upon cancellation of each Warrant or the Exercise Price has been made as a result of the issuance of rights, options or warrants as provided in paragraph (b), or rights, options or warrants or convertible or exchangeable securities as provided in paragraph (c), of this Section 3, upon the expiration of any such rights, options, or warrants, or conversion or exchange privileges under convertible or exchangeable securities, without exercise thereof, the Exercise Price and the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall, upon such expiration, be readjusted and shall thereafter be such as it would have been had it been originally adjusted (or had the original adjustment not been required, as the case may be) as if (A) the only shares of Common Stock so issued were the shares of Common Stock, if any, actually issued or sold upon the exercise of such rights, options, warrants, or conversion or exchange rights and (B) such shares of Common Stock, if any, were issued or sold for the consideration actually received by LifeMap upon such exercise plus the aggregate consideration, if any, actually received by LifeMap for the issuance, sale or grant of all such rights, options, warrants, or conversion or exchange rights whether or not exercised. Except as provided in this paragraph, no reduction in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or increase in the Exercise Price shall be made as a result of the issuance or distribution of rights, options or warrants, or convertible or exchangeable securities as described in paragraphs (b) or (c) of this Section 3.

#### 4. RESTRICTIONS ON TRANSFER.

(a) Transfer. This Option is personal to the Purchaser and may not be sold, transferred or assigned, except (i) to a successor in interest of the Purchaser as a result of any consolidation of the Purchaser with or merger of the Purchaser into another Person, (ii) to another Purchaser (as defined in the Securities Purchase Agreement) or (iii) to another Person as part of a sale of all or substantially all the property of the Purchaser to such other Person.

(b) Restrictions on Transfer of LifeMap Shares.

(i) Any LifeMap Shares purchased by Purchaser upon the exercise of this Option, may not be sold, pledged, hypothecated, transferred or assigned, in whole or in part, unless (A) a registration statement under the 1933 Act and under any applicable state securities laws is effective therefor or (B) an exemption from such registration is then available and an opinion of counsel, reasonably acceptable to LifeMap and the Transfer Agent, if any, has been rendered stating that such sale, pledge, hypothecation, transfer or assignment will not violate the 1933 Act. Notwithstanding anything to the contrary contained herein (x) the LifeMap Shares may be pledged in connection with a bona fide margin account or other loan or financing arrangement secured by the securities and no legal opinion shall be required therefor and (y) no representation, warranty, covenant or opinion shall be required for the sale, pledge, hypothecation, transfer or assignment of any LifeMap Shares if a registration statement with respect to the resale of such LifeMap Shares is effective at the time of any such sale, pledge, hypothecation, transfer or assignment.



(ii) As a condition precedent to the registration of transfer of any certificates representing LifeMap Shares upon the exercise of this Option or transfer of LifeMap Shares, the Company and LifeMap shall be entitled to obtain a letter or other instrument from the Purchaser containing such covenants, representations or warranties by such Purchaser similar to those contained in this Section 4 as reasonably deemed necessary by the Company or LifeMap to effect compliance by the Company or LifeMap with the requirements of the 1933 Act and any other applicable federal and/or state securities laws.

(iii) Any sale, pledge, hypothecation, transfer, or assignment of this Option or LifeMap Shares in violation of the foregoing restrictions shall be deemed null and void and of no binding effect.

(iv) The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares not made pursuant to registration under the 1933 Act and applicable state securities laws, or pursuant to an available exemption from registration under the 1933 Act and applicable state securities laws.

(v) The LifeMap Shares shall bear an appropriate legend, conspicuously disclosing the restrictions on transfer, under this Section 4, until the same are registered for sale under the 1933 Act or are transferred in a transaction exempt from registration under the 1933 Act entitling the transferee to receive securities that are not deemed to be "restricted securities" as such term is defined in Rule 144 under the 1933 Act. The Company agrees that upon the sale of LifeMap Shares pursuant to a registration statement or an exemption entitling the transferee to receive securities that are not deemed to be "restricted securities," or at such time as registration under the 1933 Act shall no longer be required, upon the presentation of the certificates containing such a legend to the transfer agent or warrant agent, if any, it will request removal of such legend; provided, that unless the request for removal of the legend is in connection with a sale registered under the 1933 Act, the Purchaser shall have provided an opinion of counsel, acceptable to the Company and the Transfer Agent to the effect that such legend may be removed in compliance with the 1933 Act.

(c) Investment Representations. Each Purchaser makes the following representations, severally and not jointly and severally, in connection with its acquisition of this Option and any LifeMap Shares upon the exercise of this Option:

(i) Purchaser has made such investigation of LifeMap as Purchaser deemed appropriate for determining to acquire (and thereby make an investment in) this Option and LifeMap Shares, and in making such investigation Purchaser has had access to such financial and other information concerning LifeMap as Purchaser requested. Purchaser is relying on the information communicated to Purchaser in writing by LifeMap or the Company. Purchaser has not relied on any statement or representations inconsistent with those communicated to Purchaser in writing by LifeMap or the Company. Purchaser has had a reasonable opportunity to ask questions of and receive answers from the executive officers of LifeMap and the Company concerning LifeMap, and to obtain additional information, to the extent possessed or obtainable by LifeMap or the Company without unreasonable effort or expense, necessary to verify the information communicated or provided to Purchaser. All such questions have been answered to Purchaser's satisfaction.

(ii) Purchaser is acquiring this Option and upon exercise of this Option will purchase LifeMap Shares solely for Purchaser's own account, and Purchaser has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of the LifeMap Shares or this Option; provided, that this representation and warranty shall not prohibit Purchaser from selling LifeMap Shares in the ordinary course of business pursuant to a registration statement under the 1933 Act or otherwise in compliance with the 1933 Act and applicable state securities or "blue sky" laws.

(iii) Purchaser is an "accredited investor" as defined in Rule 501 under the 1933 Act.

(iv) Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in this Option and LifeMap Shares, and has so evaluated the merits and risks of such investment. Such Purchaser is able to bear the economic risk of an investment in this Option and LifeMap Shares and, at the present time, is able to afford a complete loss of such investment.

5. **REGISTRATION RIGHTS.** The Company hereby covenants and agrees that in the event the Company receives any registration rights from LifeMap in respect of any shares of Common Stock owned by the Company, simultaneously with the exercise of any such registration rights at any time that this Option remains exercisable in whole or in part, the Company shall cause LifeMap to register all of the LifeMap Shares issuable to the Purchaser as of the applicable date of determination pursuant to the terms of this Option. The Company acknowledges and agrees that prior to excluding any LifeMap Shares from any registration statement, it shall first exclude all other shares of Common Stock owned by the Company other than any shares of Common Stock that are subject to an option provided to another Purchaser (as defined in the Securities Purchase Agreement) which shall be subject to exclusion on a pro rata basis with all other Purchasers (as defined in the Securities Purchase Agreement). The Company shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, including, without limitation, any assignment of any registration rights with respect to the Common Stock purchasable pursuant to this Option granted to the Company under any registration rights agreement by LifeMap and the Company or under any registration statement, as Purchaser may reasonably request in order to carry out the intent and accomplish the purposes of this Section 5.

6. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Incorporation, Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Option, and will at all times in good faith carry out all the provisions of this Option and take all action as may be required to protect the rights of the Purchaser. Without limiting the generality of the foregoing, the Company shall continue to hold a sufficient number of LifeMap Shares to permit Purchaser to exercise this Option in full. The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares in violation of the immediately preceding sentence.

7. PURCHASER NOT DEEMED A LIFEMAP SHAREHOLDER. The Purchaser, solely in such Person's capacity as the holder of this Option, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of LifeMap for any purpose, nor shall anything contained in this Option be construed to confer upon the Purchaser, solely in such Person's capacity as the holder of this Option, any of the rights of a shareholder of LifeMap or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the purchase of the LifeMap Shares through the due exercise of this Option. In addition, nothing contained in this Option shall be construed as imposing any liabilities on the Purchaser to purchase any securities or as a shareholder of the Company or LifeMap (other than upon exercise of this Option), whether such liabilities are asserted by the Company or LifeMap or by their respective creditors. Notwithstanding this Section, the Company shall provide the Purchaser with copies of such notices and other information given to the Common Stock holders of LifeMap generally, promptly after receipt thereof by the Company, unless the Company believes that such information is material, nonpublic information regarding the Company or LifeMap.

8. NOTICES. Any notice pursuant to this Agreement by the Purchaser to the Company shall be in writing and shall be delivered in person, or mailed first class, postage prepaid, or sent by air delivery service or by facsimile transmission (FAX) or email to the Company, at its office, Attention: Chief Financial Officer. The address of the principal office of the Company is 1301 Harbor Bay Parkway, Alameda, California 94502; FAX (510) 521-3389; email rpeabody@biotimemail.com. Any notice given pursuant to this Agreement by the Company to the Purchaser shall be in writing and shall be mailed first class, postage prepaid, or sent by air delivery service, or by facsimile transmission (FAX) or email or otherwise delivered to the Purchaser at the Purchaser's address shown on the signature page of this Option. Each party hereto may from time to time change the address to which notices to it are to be delivered or mailed hereunder by notice to the other party.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Option may only be amended by a written instrument signed by the Company and the Purchaser.

10. GOVERNING LAW; JURISDICTION. This Option shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Option shall be governed by, the internal laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of California. The Company and the Purchaser hereby irrevocably submit to the non-exclusive jurisdiction of the state and federal courts sitting in the City of New York and the County of Alameda and the United States District Court for the Northern District of California for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper.

11. CONSTRUCTION; HEADINGS. This Option shall be deemed to be jointly drafted by the Company and Purchaser and shall not be construed against any Person as the drafter hereof. The headings of this Option are for convenience of reference and shall not form part of, or affect the interpretation of, this Option.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares purchasable upon cancellation of Warrants in connection with the exercise of this Option, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Purchaser. If the Purchaser and the Company are unable to agree upon such determination or calculation of the Exercise Price or the LifeMap Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Purchaser, then the Company shall, within two (2) Business Days submit via facsimile (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Purchaser or (b) the disputed arithmetic calculation of the LifeMap Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Purchaser of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Option shall be cumulative and in addition to all other remedies available under this Option, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Purchaser to pursue actual damages for any failure by the Company to comply with the terms of this Option.

14. SEVERABILITY. If any provision of this Option is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Option so long as this Option as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

15. COMPANY'S REPRESENTATIONS AND WARRANTIES. The Company has the power and authority to execute and deliver this Option and to perform all of its obligations hereunder. This Option has been duly authorized, executed and delivered by the Company and is the valid and binding agreement of the Company, enforceable in accordance with its terms subject to: (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors; and (ii) general principles of equity. Neither the Company, nor any of its Affiliates, nor any person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause the offering of the Option or the LifeMap Shares to be integrated with prior offerings by the Company or LifeMap for purposes of registration of any of the LifeMap Shares under the 1933 Act or of any applicable shareholder approval provisions of the NYSE MKT. There is no lawsuit, arbitration proceeding, or administrative action or proceeding pending or threatened against the Company which questions the validity of this Option or any action taken or to be taken by the Company in connection with this Option or the transfer of the LifeMap Shares hereunder. The execution and delivery of this Option and consummation of the transactions contemplated by this Option (a) do not and will not violate any provisions of (i) any rule, regulation, statute, or law, (ii) the terms of any order, writ or decree of any court or judicial or regulatory authority or body, (iii) the Articles of Incorporation or bylaws of the Company, or (iv) the rules and regulations of the NYSE MKT applicable to the listing of the Company's common shares, (b) will not conflict with or result in a breach of any condition or provision or constitute a default under or pursuant to the terms of any Material Contract (as defined in the Securities Purchase Agreement), and (c) will not result in the creation or imposition of any lien, charge or encumbrance upon any of the LifeMap Shares (other than pursuant to this Option) or upon any of the assets or properties of the Company.

16. CERTAIN DEFINITIONS. For purposes of this Option, the following terms shall have the following meanings:

(a) "**1933 Act**" means the Securities Act of 1933, as amended.

(b) "**Affiliate**" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(c) "**Attribution Parties**" means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Purchaser's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Purchaser or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a "group" within the meaning of Section 13(d) of the Exchange Act and Rule 13d-5 thereunder, together with the Purchaser or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the Purchaser's and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Purchaser and all other Attribution Parties to the Maximum Percentage.

(d) "**Bloomberg**" means Bloomberg Financial Markets.

(e) "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) "**Closing Bid Price**" and "**Closing Sale Price**" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg. If the Company and the Purchaser are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(g) "**Common Stock**" means (i) the Common Stock, no par value per share, of LifeMap, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

(h) "**Eligible Market**" means the NYSE, the NYSE MKT, The NASDAQ Global Market, The NASDAQ Global Select Market, the NASDAQ Capital Market, or the OTC Bulletin Board.

(i) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

(j) "**Expiration Date**" has the meaning ascribed in Section 1, provided, that, if June 5, 2016 falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a "**Holiday**"), the next day that is not a Holiday shall apply.

(k) **"Person"** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(l) **"Principal Market"** means the principal Eligible Market on which the Common Stock trades.

(m) **"Trading Day"** means any day on which the Common Stock is traded on the Principal Market, provided that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time).

**[Signature Page Follows]**

IN WITNESS WHEREOF, the Company and Purchaser have caused this Option Agreement to be duly executed as of the Effective Date.

**BIOTIME, INC.**

By: /s/ Robert W. Peabody

Name: Robert W. Peabody

Title: Sr. VP

**PURCHASER**

Delaware Street Capital Master Fund, LP

By: /s/ Praschant Gupta

Name: Praschant Gupta

Title: CFO

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## EXERCISE NOTICE

**TO BE EXECUTED BY THE REGISTERED PURCHASER TO EXERCISE THIS  
OPTION TO PURCHASE LIFEMAP COMMON STOCK**

**BIOTIME, INC.**

The undersigned Purchaser hereby exercises the right to purchase \_\_\_\_\_ shares of Common Stock ("**LifeMap Shares**") of LifeMap Sciences, Inc., a California corporation, held by BioTime, Inc. (the "**Company**"), pursuant to the attached Option Agreement and:

Check One:

\_\_\_ A. Tenders herewith payment of the Aggregate Option Exercise Price in full in the form of a bank wire transfer to the account of the Company in the amount of \$ \_\_\_\_\_;

or

\_\_\_ B. Hereby cancels that number of Warrants required to be cancelled in lieu of cash in a Cashless Exercise pursuant to Section 2(d) of the Option Agreement.

Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Option Agreement.

Date: \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Name of Registered Purchaser

By: \_\_\_\_\_

Name:

Title:

[NOTE: The above signature should correspond exactly with the name of the Purchaser in the Option Agreement]

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**ACKNOWLEDGMENT**

The Company hereby acknowledges this Exercise Notice and hereby directs [Transfer Agent] to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated from the Company and acknowledged and agreed to by [Transfer Agent].

**BIOTIME, INC.**

By: \_\_\_\_\_

Name:

Title:

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## OPTION AGREEMENT

This Option Agreement ("Option") is entered into as of June 6, 2013 (the "**Effective Date**") by BioTime, Inc., a California corporation (the "**Company**"), and Empery Asset Master, Ltd (the "**Purchaser**") in connection that certain Stock and Warrant Purchase Agreement, dated June 3, 2013, between the Company and Purchaser (the "**Securities Purchase Agreement**").

### 1. GRANT OF OPTION.

(a) Option. The Company hereby grants to Purchaser the option (the "**Option**"), in lieu of exercising some or all of the Warrants to purchase shares of common stock of the Company issued to the Purchaser pursuant to the Securities Purchase Agreement dated as of even date herewith (the "**Warrants**" and the certificate representing such Warrants, the "**Warrant Certificate**"), to cancel each such unexercised Warrant and purchase from the Company, at the Exercise Price (as defined below) then in effect, one (1) share of Common Stock of LifeMap Sciences, Inc. ("**LifeMap**") owned by BioTime, subject to adjustment as provided herein (the "**LifeMap Shares**"), free of any liens and charges and preemptive or similar rights. The Option shall expire if not exercised on or before the earlier to occur of (a) 5:00 p.m. New York time on June 5, 2016 and (b) the date on which all of the Warrants (as defined below) shall have been exercised in full, or sold or transferred otherwise than in a sale or transfer described in Section 4(a) (the "**Expiration Date**").

(b) Minimum Exercise. This Option may be exercised by Purchaser in whole or in part; provided, however, that any partial exercise of this Option shall not be for less than the lower of (i) 10,000 LifeMap Shares and (ii) all of the remaining LifeMap Shares that are issuable as of the applicable date of determination upon the exercise of the Option held by the Purchaser pursuant to the terms hereof.

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## 2. EXERCISE OF OPTION

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(b) and Section 4), this Option may be exercised by the Purchaser at any time or times on or after the Effective Date, in whole or in part, subject to Section 1(b), by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the "**Exercise Notice**"), duly completed and executed by Purchaser, stating Purchaser's election to exercise this Option, the number of Warrants being cancelled upon exercise of this Option and the number of LifeMap Shares being purchased, and (ii) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of LifeMap Shares purchasable upon cancellation of one Warrant multiplied by the number of Warrants being cancelled (the "**Aggregate Option Exercise Price**") by wire transfer of immediately available funds, or, if the provisions of Section 2(d) are applicable, (B) by notifying the Company that the Option is being exercised pursuant to a Cashless Exercise (as defined in Section 2(d)). The Holder shall not be required to deliver the original Warrant Certificate in order to effect an exercise hereunder. However, once the Option has been exercised in full, following the final exercise thereof, the Holder shall promptly return the original Warrant Certificate to the Company for cancellation. Execution and delivery of the Exercise Notice with respect to less than all of the Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option). On or before the first (1<sup>st</sup>) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile an acknowledgment of confirmation of receipt of the Exercise Notice to the Purchaser and the transfer agent of the LifeMap Shares (the "**Transfer Agent**"), if any. On or before the third (3<sup>rd</sup>) Trading Day following the date on which the Company has received the Exercise Notice, so long as the Purchaser delivers Aggregate Option Exercise Price (or, if applicable, notice of a Cashless Exercise) on or prior to the second (2<sup>nd</sup>) Trading Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**") (provided that if the Aggregate Option Exercise Price has not been delivered by such date, the Share Delivery Date shall be one (1) Trading Day after the Aggregate Option Exercise Price is delivered), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program, credit such aggregate number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise to the Purchaser's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, or if there is no Transfer Agent, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in LifeMap's share in the name of the Purchaser or its designee, for the number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the transfer of LifeMap Shares to the Purchaser via DTC, if any. No fractional LifeMap Shares are to be issued upon the exercise of this Option, but rather the number of LifeMap Shares to be issued shall be rounded down to the nearest whole number and the Company shall refund in cash to Purchaser the portion of the Exercise Price allocable to the fraction of a LifeMap Share not issued. The Company shall pay any and all taxes which may be payable with respect to the transfer of LifeMap Shares to the Purchaser upon exercise of this Option.

(b) Exercise Price. "**Exercise Price**" means the price payable for the purchase of each LifeMap Share upon cancellation of a Warrant in connection with exercise of this Option, which shall initially be \$4.00, and shall be subject to adjustment as provided herein.

(c) Reissue of Warrant Certificate. Upon the exercise of this Option in part, and provided that Purchaser shall have delivered the Warrant Certificate(s) to the Company as permitted under Section 2(a), to the extent that Purchaser continues to hold any unexercised Warrants, the Company shall issue to Purchaser a replacement Warrant Certificate for the number of Warrants that remain unexercised after taking into account the partial exercise of the Option.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if the Common Stock is then traded on an Eligible Market and a registration statement under the 1933 Act permitting the resale of the LifeMap Shares is not in effect under the 1933 Act, the Purchaser may, in its sole discretion, exercise this Option in whole or in part by electing in lieu of paying the Aggregate Option Exercise Price in cash, to receive upon such exercise the "Net Number" of LifeMap Shares determined according to the following formula (a "**Cashless Exercise**"):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A= the total number of LifeMap Shares with respect to which this Option is then being exercised as stated in the Exercise Notice.

B= the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the date of the Exercise Notice.

C= the Exercise Price then in effect at the time of such exercise.

In such event, a number of Warrants equal to the Warrants that would be cancelled if such exercise was effected by paying the Exercise Price in cash shall be cancelled, and the number of Warrants remaining for exercise by Purchaser shall be reduced by the number of Warrants so cancelled, and execution and delivery of the Exercise Notice with respect to less than all of the LifeMap Shares purchasable pursuant to this Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option).

(e) Company's Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to transfer to the Purchaser, or cause LifeMap to issue, on or prior to the Share Delivery Date, a certificate for the number of LifeMap Shares to which the Purchaser is entitled and cause such LifeMap Shares to be registered on LifeMap's share register or to credit the Purchaser's balance account with DTC for such number of LifeMap Shares to which the Purchaser is entitled upon the Purchaser's exercise of this Option, as applicable, then, in addition to all other remedies available to the Purchaser, the Company (X) shall pay in cash to the Purchaser on each day after such third (3<sup>rd</sup>) Trading Day that the transfer of such LifeMap Shares is not timely effected an amount equal to 1.5% of the product of (A) the sum of the number of LifeMap Shares not transferred to the Purchaser on a timely basis and to which the Purchaser is entitled and (B) the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the last possible date which the Company could have transferred such LifeMap Shares to the Purchaser without violating Section 2(a), or if the LifeMap Shares are then not traded on an Eligible Market, the Exercise Price, and (Y) the Purchaser, upon written notice to the Company, may void its Exercise Notice with respect to, and retain or have returned, as the case may be, any Warrants cancelled in connection with such voided exercise; provided that the voiding of an exercise shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 2(e) or otherwise. In addition to the foregoing, if on or prior to the Share Delivery Date, the Company shall fail to transfer, or cause LifeMap to issue, a certificate to the Purchaser and cause the registration of such LifeMap Shares on LifeMap's share register or credit the Purchaser's balance account with DTC for the number of shares of Common Stock to which the Purchaser is entitled upon the Purchaser's exercise hereunder or pursuant to the Company's obligation pursuant to clause (ii) below, as applicable, and if on or after such Trading Day the Purchaser purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Purchaser of shares of Common Stock issuable upon such exercise that the Purchaser anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, within three (3) Trading Days after the Purchaser's request and in the Purchaser's discretion, either (i) pay cash to the Purchaser in an amount equal to the Purchaser's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to transfer LifeMap Shares) or credit such Purchaser's balance account with DTC for such LifeMap Shares shall terminate, or (ii) promptly honor its obligation to deliver to the Purchaser a certificate or certificates representing such shares of Common Stock or credit such Purchaser's balance account with DTC and pay cash to the Purchaser in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the Closing Bid Price on the date of exercise. Nothing shall limit the Purchaser's right to pursue a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing LifeMap Shares (or to electronically deliver such LifeMap Shares) upon the exercise of this Option as required pursuant to the terms hereof.

(f) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares, the Company shall promptly transfer to the Purchaser the number of LifeMap Shares that are not disputed and resolve such dispute in accordance with Section 12.

3. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF LIFEMAP SHARES. The Exercise Price and the number of LifeMap Shares purchasable hereunder shall be adjusted from time to time as follows:

(a) Prorata Adjustments. If LifeMap, at any time after the Effective Date, shall (A) pay a dividend in Common Stock or make a distribution in Common Stock, (B) subdivide its outstanding Common Stock, (C) combine its outstanding Common Stock into a smaller number of shares of Common Stock or (D) reclassify or change (including a change to the right to receive, or a change into, as the case may be (other than with respect to a merger or consolidation pursuant to the exercise of appraisal rights), shares of stock, other securities, property, cash or any combination thereof) its Common Stock (including any such reclassification or change in connection with a consolidation or merger in which LifeMap is the surviving corporation), the number of LifeMap Shares purchasable hereunder upon cancellation of each Warrant in connection with the exercise of this Option immediately prior thereto shall be adjusted so that the Purchaser shall be entitled to receive from the Company the kind and number of shares of Common Stock or other securities of LifeMap or other property which the Purchaser would have owned or have been entitled to receive after the happening of any of the events described above, had such Warrant been cancelled in connection with the exercise of this Option immediately prior to the happening of such event or any record date with respect thereto. An adjustment made pursuant to this paragraph shall become effective immediately after the effective date of such event retroactive to the record date, if any, for such event.

(b) Options, Warrants and Rights. If LifeMap at any time after the Effective Date, shall issue rights, options or warrants to all holders of its outstanding Common Stock, without any charge to such holders, entitling them to subscribe for or purchase Common Stock at a price per share which is lower at the record date mentioned below than the then Current Market Price (as defined in paragraph (d) below) per share of the Common Stock, the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of additional shares of Common Stock offered for subscription or purchase in connection with such rights, options or warrants, and of which the denominator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of shares which the aggregate exercise price of the total number of shares of Common Stock issuable upon exercise of such rights, options or warrants would purchase at the Current Market Price per share of the Common Stock (as determined pursuant to paragraph (d) below) at such record date. Such adjustment shall be made whenever such rights, options or warrants are issued, and shall become effective immediately after the record date for the determination of stockholders entitled to receive such rights, options or warrants

(c) Distribution of Indebtedness or Assets. If LifeMap at any time after the Effective Date, shall distribute to all holders of its Common Stock (including any distribution made in connection with a merger in which LifeMap is the surviving corporation) evidences of its indebtedness or assets (excluding cash, dividends or distributions payable out of consolidated earnings or earned surplus and dividends or distributions referred to in paragraph (a) above) or rights, options or warrants, or convertible or exchangeable securities containing the right to subscribe for or purchase Common Stock (excluding those referred to in paragraph (b) above), then in each case the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the then Current Market Price per share of Common Stock (as determined pursuant to paragraph (d) below) on the date of such distribution, and of which the denominator shall be the then Current Market Price per share of Common Stock, less the then fair value (as determined in good faith by the Board of Directors of the Company whose determination shall be conclusive) of the portion of the assets or evidences of indebtedness so distributed or of such subscription rights, options or warrants, or of such convertible or exchangeable securities applicable to one LifeMap Share. Such adjustment shall be made whenever any such distribution is made, and shall become effective on the date of distribution retroactive to the record date for the determination of shareholders entitled to receive such distribution.

(d) Current Market Price. For the purpose of any computation under paragraphs (b) and (c) of this Section, the "Current Market Price" per share of Common Stock at any date shall be the average of the daily Closing Sale Prices for the 20 consecutive Trading Days ending one Trading Day prior to the date of such computation. If the Current Market Price of the Common Stock cannot be so determined, the Board of Directors of the Company shall reasonably determine in good faith the Current Market Price on the basis of such quotations or other sales information as is available.

(e) Minimum Adjustment. No adjustment pursuant to paragraphs (b) and (c) of this Section 3 in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be required unless such adjustment would require an increase or decrease of at least one percent (1%) in the number of LifeMap Shares purchasable upon cancellation of such Warrant; provided, however, that any adjustments which by reason of this paragraph (e) are not required to be made shall be carried forward and taken into account in the determination of any subsequent adjustment. All calculations shall be made with respect to the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option, to the nearest tenth of a share and with respect to the Exercise Price payable hereunder, to the nearest whole cent.

(f) Adjustment of Exercise Price. Whenever the number of LifeMap Shares purchasable upon the exercise of this Option is adjusted, as herein provided, the Exercise Price payable upon exercise of this Option shall be adjusted by multiplying such Exercise Price immediately prior to such adjustment by a fraction, of which the numerator shall be the number of LifeMap Shares purchasable upon the exercise of this Option immediately prior to such adjustment, and of which the denominator shall be the number of LifeMap Shares purchasable immediately thereafter.

(g) Distribution in Lieu of Adjustment. No adjustment in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option need be made under paragraphs (b) and (c) of this Section 3 if the Company delivers to the Purchaser the rights options, warrants, or convertible or exchangeable securities, or evidences of indebtedness or assets referred to in those paragraphs which the Purchaser would have been entitled to receive had this Option been exercised in full prior to the happening of such event or the record date with respect thereto. No adjustment need be made for a change in the par value of the LifeMap Shares.

(h) Notice of Adjustment. Whenever the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or the Exercise Price of such LifeMap Shares is adjusted, as herein provided, the Company shall promptly, in any event within ten (10) days send to the Purchaser notice of such adjustment or adjustments. Such notice shall set forth the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option and the Exercise Price of such LifeMap Shares after such adjustment, setting forth a brief statement of the facts requiring such adjustment and setting forth the computation by which such adjustment was made.



(i) No Adjustment for Dividends. Except as provided in this Section 3, no adjustment in respect of any dividends shall be made during the term of this Option or upon the exercise of this Option.

(j) Readjustment of Number of LifeMap Shares and Exercise Price; Certain Limitations. If an adjustment of the number of LifeMap Shares purchasable upon cancellation of each Warrant or the Exercise Price has been made as a result of the issuance of rights, options or warrants as provided in paragraph (b), or rights, options or warrants or convertible or exchangeable securities as provided in paragraph (c), of this Section 3, upon the expiration of any such rights, options, or warrants, or conversion or exchange privileges under convertible or exchangeable securities, without exercise thereof, the Exercise Price and the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall, upon such expiration, be readjusted and shall thereafter be such as it would have been had it been originally adjusted (or had the original adjustment not been required, as the case may be) as if (A) the only shares of Common Stock so issued were the shares of Common Stock, if any, actually issued or sold upon the exercise of such rights, options, warrants, or conversion or exchange rights and (B) such shares of Common Stock, if any, were issued or sold for the consideration actually received by LifeMap upon such exercise plus the aggregate consideration, if any, actually received by LifeMap for the issuance, sale or grant of all such rights, options, warrants, or conversion or exchange rights whether or not exercised. Except as provided in this paragraph, no reduction in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or increase in the Exercise Price shall be made as a result of the issuance or distribution of rights, options or warrants, or convertible or exchangeable securities as described in paragraphs (b) or (c) of this Section 3.

#### 4. RESTRICTIONS ON TRANSFER.

(a) Transfer. This Option is personal to the Purchaser and may not be sold, transferred or assigned, except (i) to a successor in interest of the Purchaser as a result of any consolidation of the Purchaser with or merger of the Purchaser into another Person, (ii) to another Purchaser (as defined in the Securities Purchase Agreement) or (iii) to another Person as part of a sale of all or substantially all the property of the Purchaser to such other Person.

(b) Restrictions on Transfer of LifeMap Shares.

(i) Any LifeMap Shares purchased by Purchaser upon the exercise of this Option, may not be sold, pledged, hypothecated, transferred or assigned, in whole or in part, unless (A) a registration statement under the 1933 Act and under any applicable state securities laws is effective therefor or (B) an exemption from such registration is then available and an opinion of counsel, reasonably acceptable to LifeMap and the Transfer Agent, if any, has been rendered stating that such sale, pledge, hypothecation, transfer or assignment will not violate the 1933 Act. Notwithstanding anything to the contrary contained herein (x) the LifeMap Shares may be pledged in connection with a bona fide margin account or other loan or financing arrangement secured by the securities and no legal opinion shall be required therefor and (y) no representation, warranty, covenant or opinion shall be required for the sale, pledge, hypothecation, transfer or assignment of any LifeMap Shares if a registration statement with respect to the resale of such LifeMap Shares is effective at the time of any such sale, pledge, hypothecation, transfer or assignment.

(ii) As a condition precedent to the registration of transfer of any certificates representing LifeMap Shares upon the exercise of this Option or transfer of LifeMap Shares, the Company and LifeMap shall be entitled to obtain a letter or other instrument from the Purchaser containing such covenants, representations or warranties by such Purchaser similar to those contained in this Section 4 as reasonably deemed necessary by the Company or LifeMap to effect compliance by the Company or LifeMap with the requirements of the 1933 Act and any other applicable federal and/or state securities laws.

(iii) Any sale, pledge, hypothecation, transfer, or assignment of this Option or LifeMap Shares in violation of the foregoing restrictions shall be deemed null and void and of no binding effect.

(iv) The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares not made pursuant to registration under the 1933 Act and applicable state securities laws, or pursuant to an available exemption from registration under the 1933 Act and applicable state securities laws.

(v) The LifeMap Shares shall bear an appropriate legend, conspicuously disclosing the restrictions on transfer, under this Section 4, until the same are registered for sale under the 1933 Act or are transferred in a transaction exempt from registration under the 1933 Act entitling the transferee to receive securities that are not deemed to be "restricted securities" as such term is defined in Rule 144 under the 1933 Act. The Company agrees that upon the sale of LifeMap Shares pursuant to a registration statement or an exemption entitling the transferee to receive securities that are not deemed to be "restricted securities," or at such time as registration under the 1933 Act shall no longer be required, upon the presentation of the certificates containing such a legend to the transfer agent or warrant agent, if any, it will request removal of such legend; provided, that unless the request for removal of the legend is in connection with a sale registered under the 1933 Act, the Purchaser shall have provided an opinion of counsel, acceptable to the Company and the Transfer Agent to the effect that such legend may be removed in compliance with the 1933 Act.

(c) Investment Representations. Each Purchaser makes the following representations, severally and not jointly and severally, in connection with its acquisition of this Option and any LifeMap Shares upon the exercise of this Option:

(i) Purchaser has made such investigation of LifeMap as Purchaser deemed appropriate for determining to acquire (and thereby make an investment in) this Option and LifeMap Shares, and in making such investigation Purchaser has had access to such financial and other information concerning LifeMap as Purchaser requested. Purchaser is relying on the information communicated to Purchaser in writing by LifeMap or the Company. Purchaser has not relied on any statement or representations inconsistent with those communicated to Purchaser in writing by LifeMap or the Company. Purchaser has had a reasonable opportunity to ask questions of and receive answers from the executive officers of LifeMap and the Company concerning LifeMap, and to obtain additional information, to the extent possessed or obtainable by LifeMap or the Company without unreasonable effort or expense, necessary to verify the information communicated or provided to Purchaser. All such questions have been answered to Purchaser's satisfaction.

(ii) Purchaser is acquiring this Option and upon exercise of this Option will purchase LifeMap Shares solely for Purchaser's own account, and Purchaser has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of the LifeMap Shares or this Option; provided, that this representation and warranty shall not prohibit Purchaser from selling LifeMap Shares in the ordinary course of business pursuant to a registration statement under the 1933 Act or otherwise in compliance with the 1933 Act and applicable state securities or "blue sky" laws.

(iii) Purchaser is an "accredited investor" as defined in Rule 501 under the 1933 Act.

(iv) Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in this Option and LifeMap Shares, and has so evaluated the merits and risks of such investment. Such Purchaser is able to bear the economic risk of an investment in this Option and LifeMap Shares and, at the present time, is able to afford a complete loss of such investment.

5. **REGISTRATION RIGHTS.** The Company hereby covenants and agrees that in the event the Company receives any registration rights from LifeMap in respect of any shares of Common Stock owned by the Company, simultaneously with the exercise of any such registration rights at any time that this Option remains exercisable in whole or in part, the Company shall cause LifeMap to register all of the LifeMap Shares issuable to the Purchaser as of the applicable date of determination pursuant to the terms of this Option. The Company acknowledges and agrees that prior to excluding any LifeMap Shares from any registration statement, it shall first exclude all other shares of Common Stock owned by the Company other than any shares of Common Stock that are subject to an option provided to another Purchaser (as defined in the Securities Purchase Agreement) which shall be subject to exclusion on a pro rata basis with all other Purchasers (as defined in the Securities Purchase Agreement). The Company shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, including, without limitation, any assignment of any registration rights with respect to the Common Stock purchasable pursuant to this Option granted to the Company under any registration rights agreement by LifeMap and the Company or under any registration statement, as Purchaser may reasonably request in order to carry out the intent and accomplish the purposes of this Section 5.

6. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Incorporation, Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Option, and will at all times in good faith carry out all the provisions of this Option and take all action as may be required to protect the rights of the Purchaser. Without limiting the generality of the foregoing, the Company shall continue to hold a sufficient number of LifeMap Shares to permit Purchaser to exercise this Option in full. The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares in violation of the immediately preceding sentence.

7. PURCHASER NOT DEEMED A LIFEMAP SHAREHOLDER. The Purchaser, solely in such Person's capacity as the holder of this Option, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of LifeMap for any purpose, nor shall anything contained in this Option be construed to confer upon the Purchaser, solely in such Person's capacity as the holder of this Option, any of the rights of a shareholder of LifeMap or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the purchase of the LifeMap Shares through the due exercise of this Option. In addition, nothing contained in this Option shall be construed as imposing any liabilities on the Purchaser to purchase any securities or as a shareholder of the Company or LifeMap (other than upon exercise of this Option), whether such liabilities are asserted by the Company or LifeMap or by their respective creditors. Notwithstanding this Section, the Company shall provide the Purchaser with copies of such notices and other information given to the Common Stock holders of LifeMap generally, promptly after receipt thereof by the Company, unless the Company believes that such information is material, nonpublic information regarding the Company or LifeMap.

8. NOTICES. Any notice pursuant to this Agreement by the Purchaser to the Company shall be in writing and shall be delivered in person, or mailed first class, postage prepaid, or sent by air delivery service or by facsimile transmission (FAX) or email to the Company, at its office, Attention: Chief Financial Officer. The address of the principal office of the Company is 1301 Harbor Bay Parkway, Alameda, California 94502; FAX (510) 521-3389; email rpeabody@biotimemail.com. Any notice given pursuant to this Agreement by the Company to the Purchaser shall be in writing and shall be mailed first class, postage prepaid, or sent by air delivery service, or by facsimile transmission (FAX) or email or otherwise delivered to the Purchaser at the Purchaser's address shown on the signature page of this Option. Each party hereto may from time to time change the address to which notices to it are to be delivered or mailed hereunder by notice to the other party.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Option may only be amended by a written instrument signed by the Company and the Purchaser.

10. GOVERNING LAW; JURISDICTION. This Option shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Option shall be governed by, the internal laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of California. The Company and the Purchaser hereby irrevocably submit to the non-exclusive jurisdiction of the state and federal courts sitting in the City of New York and the County of Alameda and the United States District Court for the Northern District of California for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper.

11. CONSTRUCTION; HEADINGS. This Option shall be deemed to be jointly drafted by the Company and Purchaser and shall not be construed against any Person as the drafter hereof. The headings of this Option are for convenience of reference and shall not form part of, or affect the interpretation of, this Option.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares purchasable upon cancellation of Warrants in connection with the exercise of this Option, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Purchaser. If the Purchaser and the Company are unable to agree upon such determination or calculation of the Exercise Price or the LifeMap Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Purchaser, then the Company shall, within two (2) Business Days submit via facsimile (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Purchaser or (b) the disputed arithmetic calculation of the LifeMap Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Purchaser of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Option shall be cumulative and in addition to all other remedies available under this Option, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Purchaser to pursue actual damages for any failure by the Company to comply with the terms of this Option.

14. SEVERABILITY. If any provision of this Option is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Option so long as this Option as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

15. COMPANY'S REPRESENTATIONS AND WARRANTIES. The Company has the power and authority to execute and deliver this Option and to perform all of its obligations hereunder. This Option has been duly authorized, executed and delivered by the Company and is the valid and binding agreement of the Company, enforceable in accordance with its terms subject to: (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors; and (ii) general principles of equity. Neither the Company, nor any of its Affiliates, nor any person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause the offering of the Option or the LifeMap Shares to be integrated with prior offerings by the Company or LifeMap for purposes of registration of any of the LifeMap Shares under the 1933 Act or of any applicable shareholder approval provisions of the NYSE MKT. There is no lawsuit, arbitration proceeding, or administrative action or proceeding pending or threatened against the Company which questions the validity of this Option or any action taken or to be taken by the Company in connection with this Option or the transfer of the LifeMap Shares hereunder. The execution and delivery of this Option and consummation of the transactions contemplated by this Option (a) do not and will not violate any provisions of (i) any rule, regulation, statute, or law, (ii) the terms of any order, writ or decree of any court or judicial or regulatory authority or body, (iii) the Articles of Incorporation or bylaws of the Company, or (iv) the rules and regulations of the NYSE MKT applicable to the listing of the Company's common shares, (b) will not conflict with or result in a breach of any condition or provision or constitute a default under or pursuant to the terms of any Material Contract (as defined in the Securities Purchase Agreement), and (c) will not result in the creation or imposition of any lien, charge or encumbrance upon any of the LifeMap Shares (other than pursuant to this Option) or upon any of the assets or properties of the Company.

16. CERTAIN DEFINITIONS. For purposes of this Option, the following terms shall have the following meanings:

(a) "**1933 Act**" means the Securities Act of 1933, as amended.

(b) "**Affiliate**" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(c) "**Attribution Parties**" means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Purchaser's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Purchaser or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a "group" within the meaning of Section 13(d) of the Exchange Act and Rule 13d-5 thereunder, together with the Purchaser or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the Purchaser's and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Purchaser and all other Attribution Parties to the Maximum Percentage.

(d) "**Bloomberg**" means Bloomberg Financial Markets.

(e) "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) "**Closing Bid Price**" and "**Closing Sale Price**" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg. If the Company and the Purchaser are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(g) "**Common Stock**" means (i) the Common Stock, no par value per share, of LifeMap, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

(h) "**Eligible Market**" means the NYSE, the NYSE MKT, The NASDAQ Global Market, The NASDAQ Global Select Market, the NASDAQ Capital Market, or the OTC Bulletin Board.

(i) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

(j) "**Expiration Date**" has the meaning ascribed in Section 1, provided, that, if June 5, 2016 falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a "**Holiday**"), the next day that is not a Holiday shall apply.

(k) **"Person"** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(l) **"Principal Market"** means the principal Eligible Market on which the Common Stock trades.

(m) **"Trading Day"** means any day on which the Common Stock is traded on the Principal Market, provided that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time).

**[Signature Page Follows]**



IN WITNESS WHEREOF, the Company and Purchaser have caused this Option Agreement to be duly executed as of the Effective Date.

**BIOTIME, INC.**

By: /s/ Robert W. Peabody

Name: Robert W. Peabody

Title: Sr. VP

**PURCHASER**

By: Empery Asset Management, LP, its authorized agent

By: Empery AM GP, LLC

By: /s/ Ryan M. Lane

Name: Ryan M. Lane

Title: Managing Member

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**EXERCISE NOTICE**  
**TO BE EXECUTED BY THE REGISTERED PURCHASER TO EXERCISE THIS**  
**OPTION TO PURCHASE LIFEMAP COMMON STOCK**

**BIOTIME, INC.**

The undersigned Purchaser hereby exercises the right to purchase \_\_\_\_\_ shares of Common Stock ("**LifeMap Shares**") of LifeMap Sciences, Inc., a California corporation, held by BioTime, Inc. (the "**Company**"), pursuant to the attached Option Agreement and:

Check One:

\_\_\_ A. Tenders herewith payment of the Aggregate Option Exercise Price in full in the form of a bank wire transfer to the account of the Company in the amount of \$ \_\_\_\_\_;

or

\_\_\_ B. Hereby cancels that number of Warrants required to be cancelled in lieu of cash in a Cashless Exercise pursuant to Section 2(d) of the Option Agreement.

Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Option Agreement.

Date: \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Name of Registered Purchaser

By: \_\_\_\_\_

Name:

Title:

[NOTE: The above signature should correspond exactly with the name of the Purchaser in the Option Agreement]

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**ACKNOWLEDGMENT**

The Company hereby acknowledges this Exercise Notice and hereby directs [Transfer Agent] to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated from the Company and acknowledged and agreed to by [Transfer Agent].

**BIOTIME, INC.**

By: \_\_\_\_\_  
Name:  
Title:

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## OPTION AGREEMENT

This Option Agreement ("Option") is entered into as of June 6, 2013 (the "**Effective Date**") by BioTime, Inc., a California corporation (the "**Company**"), and Phylis M. Esposito (the "**Purchaser**") in connection that certain Stock and Warrant Purchase Agreement, dated June 3, 2013, between the Company and Purchaser (the "**Securities Purchase Agreement**").

### 1. GRANT OF OPTION.

(a) Option. The Company hereby grants to Purchaser the option (the "**Option**"), in lieu of exercising some or all of the Warrants to purchase shares of common stock of the Company issued to the Purchaser pursuant to the Securities Purchase Agreement dated as of even date herewith (the "**Warrants**" and the certificate representing such Warrants, the "**Warrant Certificate**"), to cancel each such unexercised Warrant and purchase from the Company, at the Exercise Price (as defined below) then in effect, one (1) share of Common Stock of LifeMap Sciences, Inc. ("**LifeMap**") owned by BioTime, subject to adjustment as provided herein (the "**LifeMap Shares**"), free of any liens and charges and preemptive or similar rights. The Option shall expire if not exercised on or before the earlier to occur of (a) 5:00 p.m. New York time on June 5, 2016 and (b) the date on which all of the Warrants (as defined below) shall have been exercised in full, or sold or transferred otherwise than in a sale or transfer described in Section 4(a) (the "**Expiration Date**").

(b) Minimum Exercise. This Option may be exercised by Purchaser in whole or in part; provided, however, that any partial exercise of this Option shall not be for less than the lower of (i) 10,000 LifeMap Shares and (ii) all of the remaining LifeMap Shares that are issuable as of the applicable date of determination upon the exercise of the Option held by the Purchaser pursuant to the terms hereof.

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## 2. EXERCISE OF OPTION

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(b) and Section 4), this Option may be exercised by the Purchaser at any time or times on or after the Effective Date, in whole or in part, subject to Section 1(b), by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the "**Exercise Notice**"), duly completed and executed by Purchaser, stating Purchaser's election to exercise this Option, the number of Warrants being cancelled upon exercise of this Option and the number of LifeMap Shares being purchased, and (ii) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of LifeMap Shares purchasable upon cancellation of one Warrant multiplied by the number of Warrants being cancelled (the "**Aggregate Option Exercise Price**") by wire transfer of immediately available funds, or, if the provisions of Section 2(d) are applicable, (B) by notifying the Company that the Option is being exercised pursuant to a Cashless Exercise (as defined in Section 2(d)). The Holder shall not be required to deliver the original Warrant Certificate in order to effect an exercise hereunder. However, once the Option has been exercised in full, following the final exercise thereof, the Holder shall promptly return the original Warrant Certificate to the Company for cancellation. Execution and delivery of the Exercise Notice with respect to less than all of the Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option). On or before the first (1<sup>st</sup>) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile an acknowledgment of confirmation of receipt of the Exercise Notice to the Purchaser and the transfer agent of the LifeMap Shares (the "**Transfer Agent**"), if any. On or before the third (3<sup>rd</sup>) Trading Day following the date on which the Company has received the Exercise Notice, so long as the Purchaser delivers Aggregate Option Exercise Price (or, if applicable, notice of a Cashless Exercise) on or prior to the second (2<sup>nd</sup>) Trading Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**") (provided that if the Aggregate Option Exercise Price has not been delivered by such date, the Share Delivery Date shall be one (1) Trading Day after the Aggregate Option Exercise Price is delivered), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program, credit such aggregate number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise to the Purchaser's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, or if there is no Transfer Agent, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in LifeMap's share in the name of the Purchaser or its designee, for the number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the transfer of LifeMap Shares to the Purchaser via DTC, if any. No fractional LifeMap Shares are to be issued upon the exercise of this Option, but rather the number of LifeMap Shares to be issued shall be rounded down to the nearest whole number and the Company shall refund in cash to Purchaser the portion of the Exercise Price allocable to the fraction of a LifeMap Share not issued. The Company shall pay any and all taxes which may be payable with respect to the transfer of LifeMap Shares to the Purchaser upon exercise of this Option.

(b) Exercise Price. "**Exercise Price**" means the price payable for the purchase of each LifeMap Share upon cancellation of a Warrant in connection with exercise of this Option, which shall initially be \$4.00, and shall be subject to adjustment as provided herein.

(c) Reissue of Warrant Certificate. Upon the exercise of this Option in part, and provided that Purchaser shall have delivered the Warrant Certificate(s) to the Company as permitted under Section 2(a), to the extent that Purchaser continues to hold any unexercised Warrants, the Company shall issue to Purchaser a replacement Warrant Certificate for the number of Warrants that remain unexercised after taking into account the partial exercise of the Option.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if the Common Stock is then traded on an Eligible Market and a registration statement under the 1933 Act permitting the resale of the LifeMap Shares is not in effect under the 1933 Act, the Purchaser may, in its sole discretion, exercise this Option in whole or in part by electing in lieu of paying the Aggregate Option Exercise Price in cash, to receive upon such exercise the "Net Number" of LifeMap Shares determined according to the following formula (a "**Cashless Exercise**"):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A= the total number of LifeMap Shares with respect to which this Option is then being exercised as stated in the Exercise Notice.

B= the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the date of the Exercise Notice.

C= the Exercise Price then in effect at the time of such exercise.

In such event, a number of Warrants equal to the Warrants that would be cancelled if such exercise was effected by paying the Exercise Price in cash shall be cancelled, and the number of Warrants remaining for exercise by Purchaser shall be reduced by the number of Warrants so cancelled, and execution and delivery of the Exercise Notice with respect to less than all of the LifeMap Shares purchasable pursuant to this Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option).

(e) Company's Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to transfer to the Purchaser, or cause LifeMap to issue, on or prior to the Share Delivery Date, a certificate for the number of LifeMap Shares to which the Purchaser is entitled and cause such LifeMap Shares to be registered on LifeMap's share register or to credit the Purchaser's balance account with DTC for such number of LifeMap Shares to which the Purchaser is entitled upon the Purchaser's exercise of this Option, as applicable, then, in addition to all other remedies available to the Purchaser, the Company (X) shall pay in cash to the Purchaser on each day after such third (3<sup>rd</sup>) Trading Day that the transfer of such LifeMap Shares is not timely effected an amount equal to 1.5% of the product of (A) the sum of the number of LifeMap Shares not transferred to the Purchaser on a timely basis and to which the Purchaser is entitled and (B) the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the last possible date which the Company could have transferred such LifeMap Shares to the Purchaser without violating Section 2(a), or if the LifeMap Shares are then not traded on an Eligible Market, the Exercise Price, and (Y) the Purchaser, upon written notice to the Company, may void its Exercise Notice with respect to, and retain or have returned, as the case may be, any Warrants cancelled in connection with such voided exercise; provided that the voiding of an exercise shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 2(e) or otherwise. In addition to the foregoing, if on or prior to the Share Delivery Date, the Company shall fail to transfer, or cause LifeMap to issue, a certificate to the Purchaser and cause the registration of such LifeMap Shares on LifeMap's share register or credit the Purchaser's balance account with DTC for the number of shares of Common Stock to which the Purchaser is entitled upon the Purchaser's exercise hereunder or pursuant to the Company's obligation pursuant to clause (ii) below, as applicable, and if on or after such Trading Day the Purchaser purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Purchaser of shares of Common Stock issuable upon such exercise that the Purchaser anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, within three (3) Trading Days after the Purchaser's request and in the Purchaser's discretion, either (i) pay cash to the Purchaser in an amount equal to the Purchaser's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to transfer LifeMap Shares) or credit such Purchaser's balance account with DTC for such LifeMap Shares shall terminate, or (ii) promptly honor its obligation to deliver to the Purchaser a certificate or certificates representing such shares of Common Stock or credit such Purchaser's balance account with DTC and pay cash to the Purchaser in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the Closing Bid Price on the date of exercise. Nothing shall limit the Purchaser's right to pursue a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing LifeMap Shares (or to electronically deliver such LifeMap Shares) upon the exercise of this Option as required pursuant to the terms hereof.

(f) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares, the Company shall promptly transfer to the Purchaser the number of LifeMap Shares that are not disputed and resolve such dispute in accordance with Section 12.

3. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF LIFEMAP SHARES. The Exercise Price and the number of LifeMap Shares purchasable hereunder shall be adjusted from time to time as follows:

(a) Prorata Adjustments. If LifeMap, at any time after the Effective Date, shall (A) pay a dividend in Common Stock or make a distribution in Common Stock, (B) subdivide its outstanding Common Stock, (C) combine its outstanding Common Stock into a smaller number of shares of Common Stock or (D) reclassify or change (including a change to the right to receive, or a change into, as the case may be (other than with respect to a merger or consolidation pursuant to the exercise of appraisal rights), shares of stock, other securities, property, cash or any combination thereof) its Common Stock (including any such reclassification or change in connection with a consolidation or merger in which LifeMap is the surviving corporation), the number of LifeMap Shares purchasable hereunder upon cancellation of each Warrant in connection with the exercise of this Option immediately prior thereto shall be adjusted so that the Purchaser shall be entitled to receive from the Company the kind and number of shares of Common Stock or other securities of LifeMap or other property which the Purchaser would have owned or have been entitled to receive after the happening of any of the events described above, had such Warrant been cancelled in connection with the exercise of this Option immediately prior to the happening of such event or any record date with respect thereto. An adjustment made pursuant to this paragraph shall become effective immediately after the effective date of such event retroactive to the record date, if any, for such event.

(b) Options, Warrants and Rights. If LifeMap at any time after the Effective Date, shall issue rights, options or warrants to all holders of its outstanding Common Stock, without any charge to such holders, entitling them to subscribe for or purchase Common Stock at a price per share which is lower at the record date mentioned below than the then Current Market Price (as defined in paragraph (d) below) per share of the Common Stock, the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of additional shares of Common Stock offered for subscription or purchase in connection with such rights, options or warrants, and of which the denominator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of shares which the aggregate exercise price of the total number of shares of Common Stock issuable upon exercise of such rights, options or warrants would purchase at the Current Market Price per share of the Common Stock (as determined pursuant to paragraph (d) below) at such record date. Such adjustment shall be made whenever such rights, options or warrants are issued, and shall become effective immediately after the record date for the determination of stockholders entitled to receive such rights, options or warrants

(c) Distribution of Indebtedness or Assets. If LifeMap at any time after the Effective Date, shall distribute to all holders of its Common Stock (including any distribution made in connection with a merger in which LifeMap is the surviving corporation) evidences of its indebtedness or assets (excluding cash, dividends or distributions payable out of consolidated earnings or earned surplus and dividends or distributions referred to in paragraph (a) above) or rights, options or warrants, or convertible or exchangeable securities containing the right to subscribe for or purchase Common Stock (excluding those referred to in paragraph (b) above), then in each case the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the then Current Market Price per share of Common Stock (as determined pursuant to paragraph (d) below) on the date of such distribution, and of which the denominator shall be the then Current Market Price per share of Common Stock, less the then fair value (as determined in good faith by the Board of Directors of the Company whose determination shall be conclusive) of the portion of the assets or evidences of indebtedness so distributed or of such subscription rights, options or warrants, or of such convertible or exchangeable securities applicable to one LifeMap Share. Such adjustment shall be made whenever any such distribution is made, and shall become effective on the date of distribution retroactive to the record date for the determination of shareholders entitled to receive such distribution.



(d) Current Market Price. For the purpose of any computation under paragraphs (b) and (c) of this Section, the "Current Market Price" per share of Common Stock at any date shall be the average of the daily Closing Sale Prices for the 20 consecutive Trading Days ending one Trading Day prior to the date of such computation. If the Current Market Price of the Common Stock cannot be so determined, the Board of Directors of the Company shall reasonably determine in good faith the Current Market Price on the basis of such quotations or other sales information as is available.

(e) Minimum Adjustment. No adjustment pursuant to paragraphs (b) and (c) of this Section 3 in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be required unless such adjustment would require an increase or decrease of at least one percent (1%) in the number of LifeMap Shares purchasable upon cancellation of such Warrant; provided, however, that any adjustments which by reason of this paragraph (e) are not required to be made shall be carried forward and taken into account in the determination of any subsequent adjustment. All calculations shall be made with respect to the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option, to the nearest tenth of a share and with respect to the Exercise Price payable hereunder, to the nearest whole cent.

(f) Adjustment of Exercise Price. Whenever the number of LifeMap Shares purchasable upon the exercise of this Option is adjusted, as herein provided, the Exercise Price payable upon exercise of this Option shall be adjusted by multiplying such Exercise Price immediately prior to such adjustment by a fraction, of which the numerator shall be the number of LifeMap Shares purchasable upon the exercise of this Option immediately prior to such adjustment, and of which the denominator shall be the number of LifeMap Shares purchasable immediately thereafter.

(g) Distribution in Lieu of Adjustment. No adjustment in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option need be made under paragraphs (b) and (c) of this Section 3 if the Company delivers to the Purchaser the rights options, warrants, or convertible or exchangeable securities, or evidences of indebtedness or assets referred to in those paragraphs which the Purchaser would have been entitled to receive had this Option been exercised in full prior to the happening of such event or the record date with respect thereto. No adjustment need be made for a change in the par value of the LifeMap Shares.

(h) Notice of Adjustment. Whenever the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or the Exercise Price of such LifeMap Shares is adjusted, as herein provided, the Company shall promptly, in any event within ten (10) days send to the Purchaser notice of such adjustment or adjustments. Such notice shall set forth the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option and the Exercise Price of such LifeMap Shares after such adjustment, setting forth a brief statement of the facts requiring such adjustment and setting forth the computation by which such adjustment was made.

(i) No Adjustment for Dividends. Except as provided in this Section 3, no adjustment in respect of any dividends shall be made during the term of this Option or upon the exercise of this Option.

(j) Readjustment of Number of LifeMap Shares and Exercise Price; Certain Limitations. If an adjustment of the number of LifeMap Shares purchasable upon cancellation of each Warrant or the Exercise Price has been made as a result of the issuance of rights, options or warrants as provided in paragraph (b), or rights, options or warrants or convertible or exchangeable securities as provided in paragraph (c), of this Section 3, upon the expiration of any such rights, options, or warrants, or conversion or exchange privileges under convertible or exchangeable securities, without exercise thereof, the Exercise Price and the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall, upon such expiration, be readjusted and shall thereafter be such as it would have been had it been originally adjusted (or had the original adjustment not been required, as the case may be) as if (A) the only shares of Common Stock so issued were the shares of Common Stock, if any, actually issued or sold upon the exercise of such rights, options, warrants, or conversion or exchange rights and (B) such shares of Common Stock, if any, were issued or sold for the consideration actually received by LifeMap upon such exercise plus the aggregate consideration, if any, actually received by LifeMap for the issuance, sale or grant of all such rights, options, warrants, or conversion or exchange rights whether or not exercised. Except as provided in this paragraph, no reduction in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or increase in the Exercise Price shall be made as a result of the issuance or distribution of rights, options or warrants, or convertible or exchangeable securities as described in paragraphs (b) or (c) of this Section 3.

#### 4. RESTRICTIONS ON TRANSFER.

(a) Transfer. This Option is personal to the Purchaser and may not be sold, transferred or assigned, except (i) to a successor in interest of the Purchaser as a result of any consolidation of the Purchaser with or merger of the Purchaser into another Person, (ii) to another Purchaser (as defined in the Securities Purchase Agreement) or (iii) to another Person as part of a sale of all or substantially all the property of the Purchaser to such other Person.

(b) Restrictions on Transfer of LifeMap Shares.

(i) Any LifeMap Shares purchased by Purchaser upon the exercise of this Option, may not be sold, pledged, hypothecated, transferred or assigned, in whole or in part, unless (A) a registration statement under the 1933 Act and under any applicable state securities laws is effective therefor or (B) an exemption from such registration is then available and an opinion of counsel, reasonably acceptable to LifeMap and the Transfer Agent, if any, has been rendered stating that such sale, pledge, hypothecation, transfer or assignment will not violate the 1933 Act. Notwithstanding anything to the contrary contained herein (x) the LifeMap Shares may be pledged in connection with a bona fide margin account or other loan or financing arrangement secured by the securities and no legal opinion shall be required therefor and (y) no representation, warranty, covenant or opinion shall be required for the sale, pledge, hypothecation, transfer or assignment of any LifeMap Shares if a registration statement with respect to the resale of such LifeMap Shares is effective at the time of any such sale, pledge, hypothecation, transfer or assignment.

(ii) As a condition precedent to the registration of transfer of any certificates representing LifeMap Shares upon the exercise of this Option or transfer of LifeMap Shares, the Company and LifeMap shall be entitled to obtain a letter or other instrument from the Purchaser containing such covenants, representations or warranties by such Purchaser similar to those contained in this Section 4 as reasonably deemed necessary by the Company or LifeMap to effect compliance by the Company or LifeMap with the requirements of the 1933 Act and any other applicable federal and/or state securities laws.

(iii) Any sale, pledge, hypothecation, transfer, or assignment of this Option or LifeMap Shares in violation of the foregoing restrictions shall be deemed null and void and of no binding effect.

(iv) The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares not made pursuant to registration under the 1933 Act and applicable state securities laws, or pursuant to an available exemption from registration under the 1933 Act and applicable state securities laws.

(v) The LifeMap Shares shall bear an appropriate legend, conspicuously disclosing the restrictions on transfer, under this Section 4, until the same are registered for sale under the 1933 Act or are transferred in a transaction exempt from registration under the 1933 Act entitling the transferee to receive securities that are not deemed to be "restricted securities" as such term is defined in Rule 144 under the 1933 Act. The Company agrees that upon the sale of LifeMap Shares pursuant to a registration statement or an exemption entitling the transferee to receive securities that are not deemed to be "restricted securities," or at such time as registration under the 1933 Act shall no longer be required, upon the presentation of the certificates containing such a legend to the transfer agent or warrant agent, if any, it will request removal of such legend; provided, that unless the request for removal of the legend is in connection with a sale registered under the 1933 Act, the Purchaser shall have provided an opinion of counsel, acceptable to the Company and the Transfer Agent to the effect that such legend may be removed in compliance with the 1933 Act.

(c) Investment Representations. Each Purchaser makes the following representations, severally and not jointly and severally, in connection with its acquisition of this Option and any LifeMap Shares upon the exercise of this Option:

(i) Purchaser has made such investigation of LifeMap as Purchaser deemed appropriate for determining to acquire (and thereby make an investment in) this Option and LifeMap Shares, and in making such investigation Purchaser has had access to such financial and other information concerning LifeMap as Purchaser requested. Purchaser is relying on the information communicated to Purchaser in writing by LifeMap or the Company. Purchaser has not relied on any statement or representations inconsistent with those communicated to Purchaser in writing by LifeMap or the Company. Purchaser has had a reasonable opportunity to ask questions of and receive answers from the executive officers of LifeMap and the Company concerning LifeMap, and to obtain additional information, to the extent possessed or obtainable by LifeMap or the Company without unreasonable effort or expense, necessary to verify the information communicated or provided to Purchaser. All such questions have been answered to Purchaser's satisfaction.

(ii) Purchaser is acquiring this Option and upon exercise of this Option will purchase LifeMap Shares solely for Purchaser's own account, and Purchaser has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of the LifeMap Shares or this Option; provided, that this representation and warranty shall not prohibit Purchaser from selling LifeMap Shares in the ordinary course of business pursuant to a registration statement under the 1933 Act or otherwise in compliance with the 1933 Act and applicable state securities or "blue sky" laws.

(iii) Purchaser is an "accredited investor" as defined in Rule 501 under the 1933 Act.

(iv) Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in this Option and LifeMap Shares, and has so evaluated the merits and risks of such investment. Such Purchaser is able to bear the economic risk of an investment in this Option and LifeMap Shares and, at the present time, is able to afford a complete loss of such investment.

5. **REGISTRATION RIGHTS.** The Company hereby covenants and agrees that in the event the Company receives any registration rights from LifeMap in respect of any shares of Common Stock owned by the Company, simultaneously with the exercise of any such registration rights at any time that this Option remains exercisable in whole or in part, the Company shall cause LifeMap to register all of the LifeMap Shares issuable to the Purchaser as of the applicable date of determination pursuant to the terms of this Option. The Company acknowledges and agrees that prior to excluding any LifeMap Shares from any registration statement, it shall first exclude all other shares of Common Stock owned by the Company other than any shares of Common Stock that are subject to an option provided to another Purchaser (as defined in the Securities Purchase Agreement) which shall be subject to exclusion on a pro rata basis with all other Purchasers (as defined in the Securities Purchase Agreement). The Company shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, including, without limitation, any assignment of any registration rights with respect to the Common Stock purchasable pursuant to this Option granted to the Company under any registration rights agreement by LifeMap and the Company or under any registration statement, as Purchaser may reasonably request in order to carry out the intent and accomplish the purposes of this Section 5.

6. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Incorporation, Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Option, and will at all times in good faith carry out all the provisions of this Option and take all action as may be required to protect the rights of the Purchaser. Without limiting the generality of the foregoing, the Company shall continue to hold a sufficient number of LifeMap Shares to permit Purchaser to exercise this Option in full. The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares in violation of the immediately preceding sentence.

7. PURCHASER NOT DEEMED A LIFEMAP SHAREHOLDER. The Purchaser, solely in such Person's capacity as the holder of this Option, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of LifeMap for any purpose, nor shall anything contained in this Option be construed to confer upon the Purchaser, solely in such Person's capacity as the holder of this Option, any of the rights of a shareholder of LifeMap or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the purchase of the LifeMap Shares through the due exercise of this Option. In addition, nothing contained in this Option shall be construed as imposing any liabilities on the Purchaser to purchase any securities or as a shareholder of the Company or LifeMap (other than upon exercise of this Option), whether such liabilities are asserted by the Company or LifeMap or by their respective creditors. Notwithstanding this Section, the Company shall provide the Purchaser with copies of such notices and other information given to the Common Stock holders of LifeMap generally, promptly after receipt thereof by the Company, unless the Company believes that such information is material, nonpublic information regarding the Company or LifeMap.

8. NOTICES. Any notice pursuant to this Agreement by the Purchaser to the Company shall be in writing and shall be delivered in person, or mailed first class, postage prepaid, or sent by air delivery service or by facsimile transmission (FAX) or email to the Company, at its office, Attention: Chief Financial Officer. The address of the principal office of the Company is 1301 Harbor Bay Parkway, Alameda, California 94502; FAX (510) 521-3389; email rpeabody@biotimemail.com. Any notice given pursuant to this Agreement by the Company to the Purchaser shall be in writing and shall be mailed first class, postage prepaid, or sent by air delivery service, or by facsimile transmission (FAX) or email or otherwise delivered to the Purchaser at the Purchaser's address shown on the signature page of this Option. Each party hereto may from time to time change the address to which notices to it are to be delivered or mailed hereunder by notice to the other party.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Option may only be amended by a written instrument signed by the Company and the Purchaser.

10. GOVERNING LAW; JURISDICTION. This Option shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Option shall be governed by, the internal laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of California. The Company and the Purchaser hereby irrevocably submit to the non-exclusive jurisdiction of the state and federal courts sitting in the City of New York and the County of Alameda and the United States District Court for the Northern District of California for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper.

11. CONSTRUCTION; HEADINGS. This Option shall be deemed to be jointly drafted by the Company and Purchaser and shall not be construed against any Person as the drafter hereof. The headings of this Option are for convenience of reference and shall not form part of, or affect the interpretation of, this Option.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares purchasable upon cancellation of Warrants in connection with the exercise of this Option, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Purchaser. If the Purchaser and the Company are unable to agree upon such determination or calculation of the Exercise Price or the LifeMap Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Purchaser, then the Company shall, within two (2) Business Days submit via facsimile (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Purchaser or (b) the disputed arithmetic calculation of the LifeMap Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Purchaser of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Option shall be cumulative and in addition to all other remedies available under this Option, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Purchaser to pursue actual damages for any failure by the Company to comply with the terms of this Option.

14. SEVERABILITY. If any provision of this Option is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Option so long as this Option as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

15. COMPANY'S REPRESENTATIONS AND WARRANTIES. The Company has the power and authority to execute and deliver this Option and to perform all of its obligations hereunder. This Option has been duly authorized, executed and delivered by the Company and is the valid and binding agreement of the Company, enforceable in accordance with its terms subject to: (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors; and (ii) general principles of equity. Neither the Company, nor any of its Affiliates, nor any person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause the offering of the Option or the LifeMap Shares to be integrated with prior offerings by the Company or LifeMap for purposes of registration of any of the LifeMap Shares under the 1933 Act or of any applicable shareholder approval provisions of the NYSE MKT. There is no lawsuit, arbitration proceeding, or administrative action or proceeding pending or threatened against the Company which questions the validity of this Option or any action taken or to be taken by the Company in connection with this Option or the transfer of the LifeMap Shares hereunder. The execution and delivery of this Option and consummation of the transactions contemplated by this Option (a) do not and will not violate any provisions of (i) any rule, regulation, statute, or law, (ii) the terms of any order, writ or decree of any court or judicial or regulatory authority or body, (iii) the Articles of Incorporation or bylaws of the Company, or (iv) the rules and regulations of the NYSE MKT applicable to the listing of the Company's common shares, (b) will not conflict with or result in a breach of any condition or provision or constitute a default under or pursuant to the terms of any Material Contract (as defined in the Securities Purchase Agreement), and (c) will not result in the creation or imposition of any lien, charge or encumbrance upon any of the LifeMap Shares (other than pursuant to this Option) or upon any of the assets or properties of the Company.

16. CERTAIN DEFINITIONS. For purposes of this Option, the following terms shall have the following meanings:

(a) "**1933 Act**" means the Securities Act of 1933, as amended.

(b) "**Affiliate**" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(c) "**Attribution Parties**" means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Purchaser's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Purchaser or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a "group" within the meaning of Section 13(d) of the Exchange Act and Rule 13d-5 thereunder, together with the Purchaser or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the Purchaser's and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Purchaser and all other Attribution Parties to the Maximum Percentage.

(d) "**Bloomberg**" means Bloomberg Financial Markets.

(e) "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) "**Closing Bid Price**" and "**Closing Sale Price**" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg. If the Company and the Purchaser are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(g) "**Common Stock**" means (i) the Common Stock, no par value per share, of LifeMap, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

(h) "**Eligible Market**" means the NYSE, the NYSE MKT, The NASDAQ Global Market, The NASDAQ Global Select Market, the NASDAQ Capital Market, or the OTC Bulletin Board.

(i) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

(j) "**Expiration Date**" has the meaning ascribed in Section 1, provided, that, if June 5, 2016 falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a "**Holiday**"), the next day that is not a Holiday shall apply.



(k) **"Person"** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(l) **"Principal Market"** means the principal Eligible Market on which the Common Stock trades.

(m) **"Trading Day"** means any day on which the Common Stock is traded on the Principal Market, provided that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time).

**[Signature Page Follows]**

IN WITNESS WHEREOF, the Company and Purchaser have caused this Option Agreement to be duly executed as of the Effective Date.

**BIOTIME, INC.**

By: /s/ Robert W. Peabody

Name: Robert W. Peabody

Title: Sr. VP

**PURCHASER**

\_\_\_\_\_  
By: /s/ Phylis M. Esposito

Name: Phylis M. Esposito

Title:

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**EXERCISE NOTICE**  
**TO BE EXECUTED BY THE REGISTERED PURCHASER TO EXERCISE THIS**  
**OPTION TO PURCHASE LIFEMAP COMMON STOCK**

**BIOTIME, INC.**

The undersigned Purchaser hereby exercises the right to purchase \_\_\_\_\_ shares of Common Stock ("**LifeMap Shares**") of LifeMap Sciences, Inc., a California corporation, held by BioTime, Inc. (the "**Company**"), pursuant to the attached Option Agreement and:

Check One:

\_\_\_ A. Tenders herewith payment of the Aggregate Option Exercise Price in full in the form of a bank wire transfer to the account of the Company in the amount of \$ \_\_\_\_\_;

or

\_\_\_ B. Hereby cancels that number of Warrants required to be cancelled in lieu of cash in a Cashless Exercise pursuant to Section 2(d) of the Option Agreement.

Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Option Agreement.

Date: \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Name of Registered Purchaser

By: \_\_\_\_\_

Name:

Title:

[NOTE: The above signature should correspond exactly with the name of the Purchaser in the Option Agreement]

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**ACKNOWLEDGMENT**

The Company hereby acknowledges this Exercise Notice and hereby directs [Transfer Agent] to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated from the Company and acknowledged and agreed to by [Transfer Agent].

**BIOTIME, INC.**

By: \_\_\_\_\_  
Name:  
Title:

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## OPTION AGREEMENT

This Option Agreement ("Option") is entered into as of June 6, 2013 (the "**Effective Date**") by BioTime, Inc., a California corporation (the "**Company**"), and Hartz Capital Investments, LLC (the "**Purchaser**") in connection that certain Stock and Warrant Purchase Agreement, dated June 3, 2013, between the Company and Purchaser (the "**Securities Purchase Agreement**").

### 1. GRANT OF OPTION.

(a) Option. The Company hereby grants to Purchaser the option (the "**Option**"), in lieu of exercising some or all of the Warrants to purchase shares of common stock of the Company issued to the Purchaser pursuant to the Securities Purchase Agreement dated as of even date herewith (the "**Warrants**" and the certificate representing such Warrants, the "**Warrant Certificate**"), to cancel each such unexercised Warrant and purchase from the Company, at the Exercise Price (as defined below) then in effect, one (1) share of Common Stock of LifeMap Sciences, Inc. ("**LifeMap**") owned by BioTime, subject to adjustment as provided herein (the "**LifeMap Shares**"), free of any liens and charges and preemptive or similar rights. The Option shall expire if not exercised on or before the earlier to occur of (a) 5:00 p.m. New York time on June 5, 2016 and (b) the date on which all of the Warrants (as defined below) shall have been exercised in full, or sold or transferred otherwise than in a sale or transfer described in Section 4(a) (the "**Expiration Date**").

(b) Minimum Exercise. This Option may be exercised by Purchaser in whole or in part; provided, however, that any partial exercise of this Option shall not be for less than the lower of (i) 10,000 LifeMap Shares and (ii) all of the remaining LifeMap Shares that are issuable as of the applicable date of determination upon the exercise of the Option held by the Purchaser pursuant to the terms hereof.

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## 2. EXERCISE OF OPTION

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(b) and Section 4), this Option may be exercised by the Purchaser at any time or times on or after the Effective Date, in whole or in part, subject to Section 1(b), by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the "**Exercise Notice**"), duly completed and executed by Purchaser, stating Purchaser's election to exercise this Option, the number of Warrants being cancelled upon exercise of this Option and the number of LifeMap Shares being purchased, and (ii) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of LifeMap Shares purchasable upon cancellation of one Warrant multiplied by the number of Warrants being cancelled (the "**Aggregate Option Exercise Price**") by wire transfer of immediately available funds, or, if the provisions of Section 2(d) are applicable, (B) by notifying the Company that the Option is being exercised pursuant to a Cashless Exercise (as defined in Section 2(d)). The Holder shall not be required to deliver the original Warrant Certificate in order to effect an exercise hereunder. However, once the Option has been exercised in full, following the final exercise thereof, the Holder shall promptly return the original Warrant Certificate to the Company for cancellation. Execution and delivery of the Exercise Notice with respect to less than all of the Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option). On or before the first (1<sup>st</sup>) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile an acknowledgment of confirmation of receipt of the Exercise Notice to the Purchaser and the transfer agent of the LifeMap Shares (the "**Transfer Agent**"), if any. On or before the third (3<sup>rd</sup>) Trading Day following the date on which the Company has received the Exercise Notice, so long as the Purchaser delivers Aggregate Option Exercise Price (or, if applicable, notice of a Cashless Exercise) on or prior to the second (2<sup>nd</sup>) Trading Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**") (provided that if the Aggregate Option Exercise Price has not been delivered by such date, the Share Delivery Date shall be one (1) Trading Day after the Aggregate Option Exercise Price is delivered), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program, credit such aggregate number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise to the Purchaser's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, or if there is no Transfer Agent, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in LifeMap's share in the name of the Purchaser or its designee, for the number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the transfer of LifeMap Shares to the Purchaser via DTC, if any. No fractional LifeMap Shares are to be issued upon the exercise of this Option, but rather the number of LifeMap Shares to be issued shall be rounded down to the nearest whole number and the Company shall refund in cash to Purchaser the portion of the Exercise Price allocable to the fraction of a LifeMap Share not issued. The Company shall pay any and all taxes which may be payable with respect to the transfer of LifeMap Shares to the Purchaser upon exercise of this Option.

(b) Exercise Price. "**Exercise Price**" means the price payable for the purchase of each LifeMap Share upon cancellation of a Warrant in connection with exercise of this Option, which shall initially be \$4.00, and shall be subject to adjustment as provided herein.

(c) Reissue of Warrant Certificate. Upon the exercise of this Option in part, and provided that Purchaser shall have delivered the Warrant Certificate(s) to the Company as permitted under Section 2(a), to the extent that Purchaser continues to hold any unexercised Warrants, the Company shall issue to Purchaser a replacement Warrant Certificate for the number of Warrants that remain unexercised after taking into account the partial exercise of the Option.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if the Common Stock is then traded on an Eligible Market and a registration statement under the 1933 Act permitting the resale of the LifeMap Shares is not in effect under the 1933 Act, the Purchaser may, in its sole discretion, exercise this Option in whole or in part by electing in lieu of paying the Aggregate Option Exercise Price in cash, to receive upon such exercise the "Net Number" of LifeMap Shares determined according to the following formula (a "**Cashless Exercise**"):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A= the total number of LifeMap Shares with respect to which this Option is then being exercised as stated in the Exercise Notice.

B= the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the date of the Exercise Notice.

C= the Exercise Price then in effect at the time of such exercise.

In such event, a number of Warrants equal to the Warrants that would be cancelled if such exercise was effected by paying the Exercise Price in cash shall be cancelled, and the number of Warrants remaining for exercise by Purchaser shall be reduced by the number of Warrants so cancelled, and execution and delivery of the Exercise Notice with respect to less than all of the LifeMap Shares purchasable pursuant to this Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option).

(e) Company's Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to transfer to the Purchaser, or cause LifeMap to issue, on or prior to the Share Delivery Date, a certificate for the number of LifeMap Shares to which the Purchaser is entitled and cause such LifeMap Shares to be registered on LifeMap's share register or to credit the Purchaser's balance account with DTC for such number of LifeMap Shares to which the Purchaser is entitled upon the Purchaser's exercise of this Option, as applicable, then, in addition to all other remedies available to the Purchaser, the Company (X) shall pay in cash to the Purchaser on each day after such third (3<sup>rd</sup>) Trading Day that the transfer of such LifeMap Shares is not timely effected an amount equal to 1.5% of the product of (A) the sum of the number of LifeMap Shares not transferred to the Purchaser on a timely basis and to which the Purchaser is entitled and (B) the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the last possible date which the Company could have transferred such LifeMap Shares to the Purchaser without violating Section 2(a), or if the LifeMap Shares are then not traded on an Eligible Market, the Exercise Price, and (Y) the Purchaser, upon written notice to the Company, may void its Exercise Notice with respect to, and retain or have returned, as the case may be, any Warrants cancelled in connection with such voided exercise; provided that the voiding of an exercise shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 2(e) or otherwise. In addition to the foregoing, if on or prior to the Share Delivery Date, the Company shall fail to transfer, or cause LifeMap to issue, a certificate to the Purchaser and cause the registration of such LifeMap Shares on LifeMap's share register or credit the Purchaser's balance account with DTC for the number of shares of Common Stock to which the Purchaser is entitled upon the Purchaser's exercise hereunder or pursuant to the Company's obligation pursuant to clause (ii) below, as applicable, and if on or after such Trading Day the Purchaser purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Purchaser of shares of Common Stock issuable upon such exercise that the Purchaser anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, within three (3) Trading Days after the Purchaser's request and in the Purchaser's discretion, either (i) pay cash to the Purchaser in an amount equal to the Purchaser's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to transfer LifeMap Shares) or credit such Purchaser's balance account with DTC for such LifeMap Shares shall terminate, or (ii) promptly honor its obligation to deliver to the Purchaser a certificate or certificates representing such shares of Common Stock or credit such Purchaser's balance account with DTC and pay cash to the Purchaser in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the Closing Bid Price on the date of exercise. Nothing shall limit the Purchaser's right to pursue a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing LifeMap Shares (or to electronically deliver such LifeMap Shares) upon the exercise of this Option as required pursuant to the terms hereof.

(f) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares, the Company shall promptly transfer to the Purchaser the number of LifeMap Shares that are not disputed and resolve such dispute in accordance with Section 12.

3. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF LIFEMAP SHARES. The Exercise Price and the number of LifeMap Shares purchasable hereunder shall be adjusted from time to time as follows:

(a) Prorata Adjustments. If LifeMap, at any time after the Effective Date, shall (A) pay a dividend in Common Stock or make a distribution in Common Stock, (B) subdivide its outstanding Common Stock, (C) combine its outstanding Common Stock into a smaller number of shares of Common Stock or (D) reclassify or change (including a change to the right to receive, or a change into, as the case may be (other than with respect to a merger or consolidation pursuant to the exercise of appraisal rights), shares of stock, other securities, property, cash or any combination thereof) its Common Stock (including any such reclassification or change in connection with a consolidation or merger in which LifeMap is the surviving corporation), the number of LifeMap Shares purchasable hereunder upon cancellation of each Warrant in connection with the exercise of this Option immediately prior thereto shall be adjusted so that the Purchaser shall be entitled to receive from the Company the kind and number of shares of Common Stock or other securities of LifeMap or other property which the Purchaser would have owned or have been entitled to receive after the happening of any of the events described above, had such Warrant been cancelled in connection with the exercise of this Option immediately prior to the happening of such event or any record date with respect thereto. An adjustment made pursuant to this paragraph shall become effective immediately after the effective date of such event retroactive to the record date, if any, for such event.



(b) Options, Warrants and Rights. If LifeMap at any time after the Effective Date, shall issue rights, options or warrants to all holders of its outstanding Common Stock, without any charge to such holders, entitling them to subscribe for or purchase Common Stock at a price per share which is lower at the record date mentioned below than the then Current Market Price (as defined in paragraph (d) below) per share of the Common Stock, the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of additional shares of Common Stock offered for subscription or purchase in connection with such rights, options or warrants, and of which the denominator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of shares which the aggregate exercise price of the total number of shares of Common Stock issuable upon exercise of such rights, options or warrants would purchase at the Current Market Price per share of the Common Stock (as determined pursuant to paragraph (d) below) at such record date. Such adjustment shall be made whenever such rights, options or warrants are issued, and shall become effective immediately after the record date for the determination of stockholders entitled to receive such rights, options or warrants

(c) Distribution of Indebtedness or Assets. If LifeMap at any time after the Effective Date, shall distribute to all holders of its Common Stock (including any distribution made in connection with a merger in which LifeMap is the surviving corporation) evidences of its indebtedness or assets (excluding cash, dividends or distributions payable out of consolidated earnings or earned surplus and dividends or distributions referred to in paragraph (a) above) or rights, options or warrants, or convertible or exchangeable securities containing the right to subscribe for or purchase Common Stock (excluding those referred to in paragraph (b) above), then in each case the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the then Current Market Price per share of Common Stock (as determined pursuant to paragraph (d) below) on the date of such distribution, and of which the denominator shall be the then Current Market Price per share of Common Stock, less the then fair value (as determined in good faith by the Board of Directors of the Company whose determination shall be conclusive) of the portion of the assets or evidences of indebtedness so distributed or of such subscription rights, options or warrants, or of such convertible or exchangeable securities applicable to one LifeMap Share. Such adjustment shall be made whenever any such distribution is made, and shall become effective on the date of distribution retroactive to the record date for the determination of shareholders entitled to receive such distribution.

(d) Current Market Price. For the purpose of any computation under paragraphs (b) and (c) of this Section, the "Current Market Price" per share of Common Stock at any date shall be the average of the daily Closing Sale Prices for the 20 consecutive Trading Days ending one Trading Day prior to the date of such computation. If the Current Market Price of the Common Stock cannot be so determined, the Board of Directors of the Company shall reasonably determine in good faith the Current Market Price on the basis of such quotations or other sales information as is available.

(e) Minimum Adjustment. No adjustment pursuant to paragraphs (b) and (c) of this Section 3 in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be required unless such adjustment would require an increase or decrease of at least one percent (1%) in the number of LifeMap Shares purchasable upon cancellation of such Warrant; provided, however, that any adjustments which by reason of this paragraph (e) are not required to be made shall be carried forward and taken into account in the determination of any subsequent adjustment. All calculations shall be made with respect to the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option, to the nearest tenth of a share and with respect to the Exercise Price payable hereunder, to the nearest whole cent.

(f) Adjustment of Exercise Price. Whenever the number of LifeMap Shares purchasable upon the exercise of this Option is adjusted, as herein provided, the Exercise Price payable upon exercise of this Option shall be adjusted by multiplying such Exercise Price immediately prior to such adjustment by a fraction, of which the numerator shall be the number of LifeMap Shares purchasable upon the exercise of this Option immediately prior to such adjustment, and of which the denominator shall be the number of LifeMap Shares purchasable immediately thereafter.

(g) Distribution in Lieu of Adjustment. No adjustment in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option need be made under paragraphs (b) and (c) of this Section 3 if the Company delivers to the Purchaser the rights options, warrants, or convertible or exchangeable securities, or evidences of indebtedness or assets referred to in those paragraphs which the Purchaser would have been entitled to receive had this Option been exercised in full prior to the happening of such event or the record date with respect thereto. No adjustment need be made for a change in the par value of the LifeMap Shares.

(h) Notice of Adjustment. Whenever the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or the Exercise Price of such LifeMap Shares is adjusted, as herein provided, the Company shall promptly, in any event within ten (10) days send to the Purchaser notice of such adjustment or adjustments. Such notice shall set forth the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option and the Exercise Price of such LifeMap Shares after such adjustment, setting forth a brief statement of the facts requiring such adjustment and setting forth the computation by which such adjustment was made.

(i) No Adjustment for Dividends. Except as provided in this Section 3, no adjustment in respect of any dividends shall be made during the term of this Option or upon the exercise of this Option.

(j) Readjustment of Number of LifeMap Shares and Exercise Price; Certain Limitations. If an adjustment of the number of LifeMap Shares purchasable upon cancellation of each Warrant or the Exercise Price has been made as a result of the issuance of rights, options or warrants as provided in paragraph (b), or rights, options or warrants or convertible or exchangeable securities as provided in paragraph (c), of this Section 3, upon the expiration of any such rights, options, or warrants, or conversion or exchange privileges under convertible or exchangeable securities, without exercise thereof, the Exercise Price and the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall, upon such expiration, be readjusted and shall thereafter be such as it would have been had it been originally adjusted (or had the original adjustment not been required, as the case may be) as if (A) the only shares of Common Stock so issued were the shares of Common Stock, if any, actually issued or sold upon the exercise of such rights, options, warrants, or conversion or exchange rights and (B) such shares of Common Stock, if any, were issued or sold for the consideration actually received by LifeMap upon such exercise plus the aggregate consideration, if any, actually received by LifeMap for the issuance, sale or grant of all such rights, options, warrants, or conversion or exchange rights whether or not exercised. Except as provided in this paragraph, no reduction in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or increase in the Exercise Price shall be made as a result of the issuance or distribution of rights, options or warrants, or convertible or exchangeable securities as described in paragraphs (b) or (c) of this Section 3.

#### 4. RESTRICTIONS ON TRANSFER.

(a) Transfer. This Option is personal to the Purchaser and may not be sold, transferred or assigned, except (i) to a successor in interest of the Purchaser as a result of any consolidation of the Purchaser with or merger of the Purchaser into another Person, (ii) to another Purchaser (as defined in the Securities Purchase Agreement) or (iii) to another Person as part of a sale of all or substantially all the property of the Purchaser to such other Person.

(b) Restrictions on Transfer of LifeMap Shares.

(i) Any LifeMap Shares purchased by Purchaser upon the exercise of this Option, may not be sold, pledged, hypothecated, transferred or assigned, in whole or in part, unless (A) a registration statement under the 1933 Act and under any applicable state securities laws is effective therefor or (B) an exemption from such registration is then available and an opinion of counsel, reasonably acceptable to LifeMap and the Transfer Agent, if any, has been rendered stating that such sale, pledge, hypothecation, transfer or assignment will not violate the 1933 Act. Notwithstanding anything to the contrary contained herein (x) the LifeMap Shares may be pledged in connection with a bona fide margin account or other loan or financing arrangement secured by the securities and no legal opinion shall be required therefor and (y) no representation, warranty, covenant or opinion shall be required for the sale, pledge, hypothecation, transfer or assignment of any LifeMap Shares if a registration statement with respect to the resale of such LifeMap Shares is effective at the time of any such sale, pledge, hypothecation, transfer or assignment.

(ii) As a condition precedent to the registration of transfer of any certificates representing LifeMap Shares upon the exercise of this Option or transfer of LifeMap Shares, the Company and LifeMap shall be entitled to obtain a letter or other instrument from the Purchaser containing such covenants, representations or warranties by such Purchaser similar to those contained in this Section 4 as reasonably deemed necessary by the Company or LifeMap to effect compliance by the Company or LifeMap with the requirements of the 1933 Act and any other applicable federal and/or state securities laws.

(iii) Any sale, pledge, hypothecation, transfer, or assignment of this Option or LifeMap Shares in violation of the foregoing restrictions shall be deemed null and void and of no binding effect.

(iv) The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares not made pursuant to registration under the 1933 Act and applicable state securities laws, or pursuant to an available exemption from registration under the 1933 Act and applicable state securities laws.

(v) The LifeMap Shares shall bear an appropriate legend, conspicuously disclosing the restrictions on transfer, under this Section 4, until the same are registered for sale under the 1933 Act or are transferred in a transaction exempt from registration under the 1933 Act entitling the transferee to receive securities that are not deemed to be "restricted securities" as such term is defined in Rule 144 under the 1933 Act. The Company agrees that upon the sale of LifeMap Shares pursuant to a registration statement or an exemption entitling the transferee to receive securities that are not deemed to be "restricted securities," or at such time as registration under the 1933 Act shall no longer be required, upon the presentation of the certificates containing such a legend to the transfer agent or warrant agent, if any, it will request removal of such legend; provided, that unless the request for removal of the legend is in connection with a sale registered under the 1933 Act, the Purchaser shall have provided an opinion of counsel, acceptable to the Company and the Transfer Agent to the effect that such legend may be removed in compliance with the 1933 Act.

(c) Investment Representations. Each Purchaser makes the following representations, severally and not jointly and severally, in connection with its acquisition of this Option and any LifeMap Shares upon the exercise of this Option:

(i) Purchaser has made such investigation of LifeMap as Purchaser deemed appropriate for determining to acquire (and thereby make an investment in) this Option and LifeMap Shares, and in making such investigation Purchaser has had access to such financial and other information concerning LifeMap as Purchaser requested. Purchaser is relying on the information communicated to Purchaser in writing by LifeMap or the Company. Purchaser has not relied on any statement or representations inconsistent with those communicated to Purchaser in writing by LifeMap or the Company. Purchaser has had a reasonable opportunity to ask questions of and receive answers from the executive officers of LifeMap and the Company concerning LifeMap, and to obtain additional information, to the extent possessed or obtainable by LifeMap or the Company without unreasonable effort or expense, necessary to verify the information communicated or provided to Purchaser. All such questions have been answered to Purchaser's satisfaction.

(ii) Purchaser is acquiring this Option and upon exercise of this Option will purchase LifeMap Shares solely for Purchaser's own account, and Purchaser has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of the LifeMap Shares or this Option; provided, that this representation and warranty shall not prohibit Purchaser from selling LifeMap Shares in the ordinary course of business pursuant to a registration statement under the 1933 Act or otherwise in compliance with the 1933 Act and applicable state securities or "blue sky" laws.

(iii) Purchaser is an "accredited investor" as defined in Rule 501 under the 1933 Act.

(iv) Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in this Option and LifeMap Shares, and has so evaluated the merits and risks of such investment. Such Purchaser is able to bear the economic risk of an investment in this Option and LifeMap Shares and, at the present time, is able to afford a complete loss of such investment.

5. **REGISTRATION RIGHTS.** The Company hereby covenants and agrees that in the event the Company receives any registration rights from LifeMap in respect of any shares of Common Stock owned by the Company, simultaneously with the exercise of any such registration rights at any time that this Option remains exercisable in whole or in part, the Company shall cause LifeMap to register all of the LifeMap Shares issuable to the Purchaser as of the applicable date of determination pursuant to the terms of this Option. The Company acknowledges and agrees that prior to excluding any LifeMap Shares from any registration statement, it shall first exclude all other shares of Common Stock owned by the Company other than any shares of Common Stock that are subject to an option provided to another Purchaser (as defined in the Securities Purchase Agreement) which shall be subject to exclusion on a pro rata basis with all other Purchasers (as defined in the Securities Purchase Agreement). The Company shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, including, without limitation, any assignment of any registration rights with respect to the Common Stock purchasable pursuant to this Option granted to the Company under any registration rights agreement by LifeMap and the Company or under any registration statement, as Purchaser may reasonably request in order to carry out the intent and accomplish the purposes of this Section 5.

6. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Incorporation, Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Option, and will at all times in good faith carry out all the provisions of this Option and take all action as may be required to protect the rights of the Purchaser. Without limiting the generality of the foregoing, the Company shall continue to hold a sufficient number of LifeMap Shares to permit Purchaser to exercise this Option in full. The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares in violation of the immediately preceding sentence.

7. PURCHASER NOT DEEMED A LIFEMAP SHAREHOLDER. The Purchaser, solely in such Person's capacity as the holder of this Option, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of LifeMap for any purpose, nor shall anything contained in this Option be construed to confer upon the Purchaser, solely in such Person's capacity as the holder of this Option, any of the rights of a shareholder of LifeMap or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the purchase of the LifeMap Shares through the due exercise of this Option. In addition, nothing contained in this Option shall be construed as imposing any liabilities on the Purchaser to purchase any securities or as a shareholder of the Company or LifeMap (other than upon exercise of this Option), whether such liabilities are asserted by the Company or LifeMap or by their respective creditors. Notwithstanding this Section, the Company shall provide the Purchaser with copies of such notices and other information given to the Common Stock holders of LifeMap generally, promptly after receipt thereof by the Company, unless the Company believes that such information is material, nonpublic information regarding the Company or LifeMap.

8. NOTICES. Any notice pursuant to this Agreement by the Purchaser to the Company shall be in writing and shall be delivered in person, or mailed first class, postage prepaid, or sent by air delivery service or by facsimile transmission (FAX) or email to the Company, at its office, Attention: Chief Financial Officer. The address of the principal office of the Company is 1301 Harbor Bay Parkway, Alameda, California 94502; FAX (510) 521-3389; email rpeabody@biotimemail.com. Any notice given pursuant to this Agreement by the Company to the Purchaser shall be in writing and shall be mailed first class, postage prepaid, or sent by air delivery service, or by facsimile transmission (FAX) or email or otherwise delivered to the Purchaser at the Purchaser's address shown on the signature page of this Option. Each party hereto may from time to time change the address to which notices to it are to be delivered or mailed hereunder by notice to the other party.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Option may only be amended by a written instrument signed by the Company and the Purchaser.

10. GOVERNING LAW; JURISDICTION. This Option shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Option shall be governed by, the internal laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of California. The Company and the Purchaser hereby irrevocably submit to the non-exclusive jurisdiction of the state and federal courts sitting in the City of New York and the County of Alameda and the United States District Court for the Northern District of California for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper.

11. CONSTRUCTION; HEADINGS. This Option shall be deemed to be jointly drafted by the Company and Purchaser and shall not be construed against any Person as the drafter hereof. The headings of this Option are for convenience of reference and shall not form part of, or affect the interpretation of, this Option.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares purchasable upon cancellation of Warrants in connection with the exercise of this Option, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Purchaser. If the Purchaser and the Company are unable to agree upon such determination or calculation of the Exercise Price or the LifeMap Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Purchaser, then the Company shall, within two (2) Business Days submit via facsimile (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Purchaser or (b) the disputed arithmetic calculation of the LifeMap Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Purchaser of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Option shall be cumulative and in addition to all other remedies available under this Option, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Purchaser to pursue actual damages for any failure by the Company to comply with the terms of this Option.

14. SEVERABILITY. If any provision of this Option is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Option so long as this Option as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

15. COMPANY'S REPRESENTATIONS AND WARRANTIES. The Company has the power and authority to execute and deliver this Option and to perform all of its obligations hereunder. This Option has been duly authorized, executed and delivered by the Company and is the valid and binding agreement of the Company, enforceable in accordance with its terms subject to: (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors; and (ii) general principles of equity. Neither the Company, nor any of its Affiliates, nor any person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause the offering of the Option or the LifeMap Shares to be integrated with prior offerings by the Company or LifeMap for purposes of registration of any of the LifeMap Shares under the 1933 Act or of any applicable shareholder approval provisions of the NYSE MKT. There is no lawsuit, arbitration proceeding, or administrative action or proceeding pending or threatened against the Company which questions the validity of this Option or any action taken or to be taken by the Company in connection with this Option or the transfer of the LifeMap Shares hereunder. The execution and delivery of this Option and consummation of the transactions contemplated by this Option (a) do not and will not violate any provisions of (i) any rule, regulation, statute, or law, (ii) the terms of any order, writ or decree of any court or judicial or regulatory authority or body, (iii) the Articles of Incorporation or bylaws of the Company, or (iv) the rules and regulations of the NYSE MKT applicable to the listing of the Company's common shares, (b) will not conflict with or result in a breach of any condition or provision or constitute a default under or pursuant to the terms of any Material Contract (as defined in the Securities Purchase Agreement), and (c) will not result in the creation or imposition of any lien, charge or encumbrance upon any of the LifeMap Shares (other than pursuant to this Option) or upon any of the assets or properties of the Company.

16. CERTAIN DEFINITIONS. For purposes of this Option, the following terms shall have the following meanings:

(a) "**1933 Act**" means the Securities Act of 1933, as amended.

(b) "**Affiliate**" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.



(c) "**Attribution Parties**" means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Purchaser's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Purchaser or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a "group" within the meaning of Section 13(d) of the Exchange Act and Rule 13d-5 thereunder, together with the Purchaser or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the Purchaser's and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Purchaser and all other Attribution Parties to the Maximum Percentage.

(d) "**Bloomberg**" means Bloomberg Financial Markets.

(e) "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) "**Closing Bid Price**" and "**Closing Sale Price**" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg. If the Company and the Purchaser are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(g) "**Common Stock**" means (i) the Common Stock, no par value per share, of LifeMap, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

(h) "**Eligible Market**" means the NYSE, the NYSE MKT, The NASDAQ Global Market, The NASDAQ Global Select Market, the NASDAQ Capital Market, or the OTC Bulletin Board.

(i) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

(j) "**Expiration Date**" has the meaning ascribed in Section 1, provided, that, if June 5, 2016 falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a "**Holiday**"), the next day that is not a Holiday shall apply.

(k) **"Person"** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(l) **"Principal Market"** means the principal Eligible Market on which the Common Stock trades.

(m) **"Trading Day"** means any day on which the Common Stock is traded on the Principal Market, provided that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time).

**[Signature Page Follows]**

IN WITNESS WHEREOF, the Company and Purchaser have caused this Option Agreement to be duly executed as of the Effective Date.

**BIOTIME, INC.**

By: /s/ Robert W. Peabody

Name: Robert W. Peabody

Title: Sr. VP

**PURCHASER**

By: Empery Asset Management, LP, its authorized agent

By: Empery AM GP, LLC

By: /s/ Ryan M. Lane

Name: Ryan M. Lane

Title: Managing Member

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**EXERCISE NOTICE**  
**TO BE EXECUTED BY THE REGISTERED PURCHASER TO EXERCISE THIS**  
**OPTION TO PURCHASE LIFEMAP COMMON STOCK**

**BIOTIME, INC.**

The undersigned Purchaser hereby exercises the right to purchase \_\_\_\_\_ shares of Common Stock ("**LifeMap Shares**") of LifeMap Sciences, Inc., a California corporation, held by BioTime, Inc. (the "**Company**"), pursuant to the attached Option Agreement and:

Check One:

\_\_\_ A. Tenders herewith payment of the Aggregate Option Exercise Price in full in the form of a bank wire transfer to the account of the Company in the amount of \$ \_\_\_\_\_;

or

\_\_\_ B. Hereby cancels that number of Warrants required to be cancelled in lieu of cash in a Cashless Exercise pursuant to Section 2(d) of the Option Agreement.

Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Option Agreement.

Date: \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Name of Registered Purchaser

By: \_\_\_\_\_

Name:

Title:

[NOTE: The above signature should correspond exactly with the name of the Purchaser in the Option Agreement]

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**ACKNOWLEDGMENT**

The Company hereby acknowledges this Exercise Notice and hereby directs [Transfer Agent] to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated from the Company and acknowledged and agreed to by [Transfer Agent].

**BIOTIME, INC.**

By: \_\_\_\_\_  
Name:  
Title:

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## OPTION AGREEMENT

This Option Agreement ("Option") is entered into as of June 6, 2013 (the "**Effective Date**") by BioTime, Inc., a California corporation (the "**Company**"), and Patrick Lin (the "**Purchaser**") in connection that certain Stock and Warrant Purchase Agreement, dated June 3, 2013, between the Company and Purchaser (the "**Securities Purchase Agreement**").

### 1. GRANT OF OPTION.

(a) Option. The Company hereby grants to Purchaser the option (the "**Option**"), in lieu of exercising some or all of the Warrants to purchase shares of common stock of the Company issued to the Purchaser pursuant to the Securities Purchase Agreement dated as of even date herewith (the "**Warrants**" and the certificate representing such Warrants, the "**Warrant Certificate**"), to cancel each such unexercised Warrant and purchase from the Company, at the Exercise Price (as defined below) then in effect, one (1) share of Common Stock of LifeMap Sciences, Inc. ("**LifeMap**") owned by BioTime, subject to adjustment as provided herein (the "**LifeMap Shares**"), free of any liens and charges and preemptive or similar rights. The Option shall expire if not exercised on or before the earlier to occur of (a) 5:00 p.m. New York time on June 5, 2016 and (b) the date on which all of the Warrants (as defined below) shall have been exercised in full, or sold or transferred otherwise than in a sale or transfer described in Section 4(a) (the "**Expiration Date**").

(b) Minimum Exercise. This Option may be exercised by Purchaser in whole or in part; provided, however, that any partial exercise of this Option shall not be for less than the lower of (i) 10,000 LifeMap Shares and (ii) all of the remaining LifeMap Shares that are issuable as of the applicable date of determination upon the exercise of the Option held by the Purchaser pursuant to the terms hereof.

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## 2. EXERCISE OF OPTION

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(b) and Section 4), this Option may be exercised by the Purchaser at any time or times on or after the Effective Date, in whole or in part, subject to Section 1(b), by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the "**Exercise Notice**"), duly completed and executed by Purchaser, stating Purchaser's election to exercise this Option, the number of Warrants being cancelled upon exercise of this Option and the number of LifeMap Shares being purchased, and (ii) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of LifeMap Shares purchasable upon cancellation of one Warrant multiplied by the number of Warrants being cancelled (the "**Aggregate Option Exercise Price**") by wire transfer of immediately available funds, or, if the provisions of Section 2(d) are applicable, (B) by notifying the Company that the Option is being exercised pursuant to a Cashless Exercise (as defined in Section 2(d)). The Holder shall not be required to deliver the original Warrant Certificate in order to effect an exercise hereunder. However, once the Option has been exercised in full, following the final exercise thereof, the Holder shall promptly return the original Warrant Certificate to the Company for cancellation. Execution and delivery of the Exercise Notice with respect to less than all of the Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option). On or before the first (1<sup>st</sup>) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile an acknowledgment of confirmation of receipt of the Exercise Notice to the Purchaser and the transfer agent of the LifeMap Shares (the "**Transfer Agent**"), if any. On or before the third (3<sup>rd</sup>) Trading Day following the date on which the Company has received the Exercise Notice, so long as the Purchaser delivers Aggregate Option Exercise Price (or, if applicable, notice of a Cashless Exercise) on or prior to the second (2<sup>nd</sup>) Trading Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**") (provided that if the Aggregate Option Exercise Price has not been delivered by such date, the Share Delivery Date shall be one (1) Trading Day after the Aggregate Option Exercise Price is delivered), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program, credit such aggregate number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise to the Purchaser's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, or if there is no Transfer Agent, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in LifeMap's share in the name of the Purchaser or its designee, for the number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the transfer of LifeMap Shares to the Purchaser via DTC, if any. No fractional LifeMap Shares are to be issued upon the exercise of this Option, but rather the number of LifeMap Shares to be issued shall be rounded down to the nearest whole number and the Company shall refund in cash to Purchaser the portion of the Exercise Price allocable to the fraction of a LifeMap Share not issued. The Company shall pay any and all taxes which may be payable with respect to the transfer of LifeMap Shares to the Purchaser upon exercise of this Option.

(b) Exercise Price. "**Exercise Price**" means the price payable for the purchase of each LifeMap Share upon cancellation of a Warrant in connection with exercise of this Option, which shall initially be \$4.00, and shall be subject to adjustment as provided herein.

(c) Reissue of Warrant Certificate. Upon the exercise of this Option in part, and provided that Purchaser shall have delivered the Warrant Certificate(s) to the Company as permitted under Section 2(a), to the extent that Purchaser continues to hold any unexercised Warrants, the Company shall issue to Purchaser a replacement Warrant Certificate for the number of Warrants that remain unexercised after taking into account the partial exercise of the Option.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if the Common Stock is then traded on an Eligible Market and a registration statement under the 1933 Act permitting the resale of the LifeMap Shares is not in effect under the 1933 Act, the Purchaser may, in its sole discretion, exercise this Option in whole or in part by electing in lieu of paying the Aggregate Option Exercise Price in cash, to receive upon such exercise the "Net Number" of LifeMap Shares determined according to the following formula (a "**Cashless Exercise**"):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A= the total number of LifeMap Shares with respect to which this Option is then being exercised as stated in the Exercise Notice.

B= the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the date of the Exercise Notice.

C= the Exercise Price then in effect at the time of such exercise.

In such event, a number of Warrants equal to the Warrants that would be cancelled if such exercise was effected by paying the Exercise Price in cash shall be cancelled, and the number of Warrants remaining for exercise by Purchaser shall be reduced by the number of Warrants so cancelled, and execution and delivery of the Exercise Notice with respect to less than all of the LifeMap Shares purchasable pursuant to this Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option).

(e) Company's Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to transfer to the Purchaser, or cause LifeMap to issue, on or prior to the Share Delivery Date, a certificate for the number of LifeMap Shares to which the Purchaser is entitled and cause such LifeMap Shares to be registered on LifeMap's share register or to credit the Purchaser's balance account with DTC for such number of LifeMap Shares to which the Purchaser is entitled upon the Purchaser's exercise of this Option, as applicable, then, in addition to all other remedies available to the Purchaser, the Company (X) shall pay in cash to the Purchaser on each day after such third (3<sup>rd</sup>) Trading Day that the transfer of such LifeMap Shares is not timely effected an amount equal to 1.5% of the product of (A) the sum of the number of LifeMap Shares not transferred to the Purchaser on a timely basis and to which the Purchaser is entitled and (B) the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the last possible date which the Company could have transferred such LifeMap Shares to the Purchaser without violating Section 2(a), or if the LifeMap Shares are then not traded on an Eligible Market, the Exercise Price, and (Y) the Purchaser, upon written notice to the Company, may void its Exercise Notice with respect to, and retain or have returned, as the case may be, any Warrants cancelled in connection with such voided exercise; provided that the voiding of an exercise shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 2(e) or otherwise. In addition to the foregoing, if on or prior to the Share Delivery Date, the Company shall fail to transfer, or cause LifeMap to issue, a certificate to the Purchaser and cause the registration of such LifeMap Shares on LifeMap's share register or credit the Purchaser's balance account with DTC for the number of shares of Common Stock to which the Purchaser is entitled upon the Purchaser's exercise hereunder or pursuant to the Company's obligation pursuant to clause (ii) below, as applicable, and if on or after such Trading Day the Purchaser purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Purchaser of shares of Common Stock issuable upon such exercise that the Purchaser anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, within three (3) Trading Days after the Purchaser's request and in the Purchaser's discretion, either (i) pay cash to the Purchaser in an amount equal to the Purchaser's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to transfer LifeMap Shares) or credit such Purchaser's balance account with DTC for such LifeMap Shares shall terminate, or (ii) promptly honor its obligation to deliver to the Purchaser a certificate or certificates representing such shares of Common Stock or credit such Purchaser's balance account with DTC and pay cash to the Purchaser in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the Closing Bid Price on the date of exercise. Nothing shall limit the Purchaser's right to pursue a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing LifeMap Shares (or to electronically deliver such LifeMap Shares) upon the exercise of this Option as required pursuant to the terms hereof.



(f) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares, the Company shall promptly transfer to the Purchaser the number of LifeMap Shares that are not disputed and resolve such dispute in accordance with Section 12.

3. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF LIFEMAP SHARES. The Exercise Price and the number of LifeMap Shares purchasable hereunder shall be adjusted from time to time as follows:

(a) Prorata Adjustments. If LifeMap, at any time after the Effective Date, shall (A) pay a dividend in Common Stock or make a distribution in Common Stock, (B) subdivide its outstanding Common Stock, (C) combine its outstanding Common Stock into a smaller number of shares of Common Stock or (D) reclassify or change (including a change to the right to receive, or a change into, as the case may be (other than with respect to a merger or consolidation pursuant to the exercise of appraisal rights), shares of stock, other securities, property, cash or any combination thereof) its Common Stock (including any such reclassification or change in connection with a consolidation or merger in which LifeMap is the surviving corporation), the number of LifeMap Shares purchasable hereunder upon cancellation of each Warrant in connection with the exercise of this Option immediately prior thereto shall be adjusted so that the Purchaser shall be entitled to receive from the Company the kind and number of shares of Common Stock or other securities of LifeMap or other property which the Purchaser would have owned or have been entitled to receive after the happening of any of the events described above, had such Warrant been cancelled in connection with the exercise of this Option immediately prior to the happening of such event or any record date with respect thereto. An adjustment made pursuant to this paragraph shall become effective immediately after the effective date of such event retroactive to the record date, if any, for such event.

(b) Options, Warrants and Rights. If LifeMap at any time after the Effective Date, shall issue rights, options or warrants to all holders of its outstanding Common Stock, without any charge to such holders, entitling them to subscribe for or purchase Common Stock at a price per share which is lower at the record date mentioned below than the then Current Market Price (as defined in paragraph (d) below) per share of the Common Stock, the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of additional shares of Common Stock offered for subscription or purchase in connection with such rights, options or warrants, and of which the denominator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of shares which the aggregate exercise price of the total number of shares of Common Stock issuable upon exercise of such rights, options or warrants would purchase at the Current Market Price per share of the Common Stock (as determined pursuant to paragraph (d) below) at such record date. Such adjustment shall be made whenever such rights, options or warrants are issued, and shall become effective immediately after the record date for the determination of stockholders entitled to receive such rights, options or warrants

(c) Distribution of Indebtedness or Assets. If LifeMap at any time after the Effective Date, shall distribute to all holders of its Common Stock (including any distribution made in connection with a merger in which LifeMap is the surviving corporation) evidences of its indebtedness or assets (excluding cash, dividends or distributions payable out of consolidated earnings or earned surplus and dividends or distributions referred to in paragraph (a) above) or rights, options or warrants, or convertible or exchangeable securities containing the right to subscribe for or purchase Common Stock (excluding those referred to in paragraph (b) above), then in each case the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the then Current Market Price per share of Common Stock (as determined pursuant to paragraph (d) below) on the date of such distribution, and of which the denominator shall be the then Current Market Price per share of Common Stock, less the then fair value (as determined in good faith by the Board of Directors of the Company whose determination shall be conclusive) of the portion of the assets or evidences of indebtedness so distributed or of such subscription rights, options or warrants, or of such convertible or exchangeable securities applicable to one LifeMap Share. Such adjustment shall be made whenever any such distribution is made, and shall become effective on the date of distribution retroactive to the record date for the determination of shareholders entitled to receive such distribution.

(d) Current Market Price. For the purpose of any computation under paragraphs (b) and (c) of this Section, the "Current Market Price" per share of Common Stock at any date shall be the average of the daily Closing Sale Prices for the 20 consecutive Trading Days ending one Trading Day prior to the date of such computation. If the Current Market Price of the Common Stock cannot be so determined, the Board of Directors of the Company shall reasonably determine in good faith the Current Market Price on the basis of such quotations or other sales information as is available.

(e) Minimum Adjustment. No adjustment pursuant to paragraphs (b) and (c) of this Section 3 in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be required unless such adjustment would require an increase or decrease of at least one percent (1%) in the number of LifeMap Shares purchasable upon cancellation of such Warrant; provided, however, that any adjustments which by reason of this paragraph (e) are not required to be made shall be carried forward and taken into account in the determination of any subsequent adjustment. All calculations shall be made with respect to the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option, to the nearest tenth of a share and with respect to the Exercise Price payable hereunder, to the nearest whole cent.

(f) Adjustment of Exercise Price. Whenever the number of LifeMap Shares purchasable upon the exercise of this Option is adjusted, as herein provided, the Exercise Price payable upon exercise of this Option shall be adjusted by multiplying such Exercise Price immediately prior to such adjustment by a fraction, of which the numerator shall be the number of LifeMap Shares purchasable upon the exercise of this Option immediately prior to such adjustment, and of which the denominator shall be the number of LifeMap Shares purchasable immediately thereafter.

(g) Distribution in Lieu of Adjustment. No adjustment in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option need be made under paragraphs (b) and (c) of this Section 3 if the Company delivers to the Purchaser the rights options, warrants, or convertible or exchangeable securities, or evidences of indebtedness or assets referred to in those paragraphs which the Purchaser would have been entitled to receive had this Option been exercised in full prior to the happening of such event or the record date with respect thereto. No adjustment need be made for a change in the par value of the LifeMap Shares.

(h) Notice of Adjustment. Whenever the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or the Exercise Price of such LifeMap Shares is adjusted, as herein provided, the Company shall promptly, in any event within ten (10) days send to the Purchaser notice of such adjustment or adjustments. Such notice shall set forth the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option and the Exercise Price of such LifeMap Shares after such adjustment, setting forth a brief statement of the facts requiring such adjustment and setting forth the computation by which such adjustment was made.

(i) No Adjustment for Dividends. Except as provided in this Section 3, no adjustment in respect of any dividends shall be made during the term of this Option or upon the exercise of this Option.

(j) Readjustment of Number of LifeMap Shares and Exercise Price; Certain Limitations. If an adjustment of the number of LifeMap Shares purchasable upon cancellation of each Warrant or the Exercise Price has been made as a result of the issuance of rights, options or warrants as provided in paragraph (b), or rights, options or warrants or convertible or exchangeable securities as provided in paragraph (c), of this Section 3, upon the expiration of any such rights, options, or warrants, or conversion or exchange privileges under convertible or exchangeable securities, without exercise thereof, the Exercise Price and the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall, upon such expiration, be readjusted and shall thereafter be such as it would have been had it been originally adjusted (or had the original adjustment not been required, as the case may be) as if (A) the only shares of Common Stock so issued were the shares of Common Stock, if any, actually issued or sold upon the exercise of such rights, options, warrants, or conversion or exchange rights and (B) such shares of Common Stock, if any, were issued or sold for the consideration actually received by LifeMap upon such exercise plus the aggregate consideration, if any, actually received by LifeMap for the issuance, sale or grant of all such rights, options, warrants, or conversion or exchange rights whether or not exercised. Except as provided in this paragraph, no reduction in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or increase in the Exercise Price shall be made as a result of the issuance or distribution of rights, options or warrants, or convertible or exchangeable securities as described in paragraphs (b) or (c) of this Section 3.

#### 4. RESTRICTIONS ON TRANSFER.

(a) Transfer. This Option is personal to the Purchaser and may not be sold, transferred or assigned, except (i) to a successor in interest of the Purchaser as a result of any consolidation of the Purchaser with or merger of the Purchaser into another Person, (ii) to another Purchaser (as defined in the Securities Purchase Agreement) or (iii) to another Person as part of a sale of all or substantially all the property of the Purchaser to such other Person.

(b) Restrictions on Transfer of LifeMap Shares.

(i) Any LifeMap Shares purchased by Purchaser upon the exercise of this Option, may not be sold, pledged, hypothecated, transferred or assigned, in whole or in part, unless (A) a registration statement under the 1933 Act and under any applicable state securities laws is effective therefor or (B) an exemption from such registration is then available and an opinion of counsel, reasonably acceptable to LifeMap and the Transfer Agent, if any, has been rendered stating that such sale, pledge, hypothecation, transfer or assignment will not violate the 1933 Act. Notwithstanding anything to the contrary contained herein (x) the LifeMap Shares may be pledged in connection with a bona fide margin account or other loan or financing arrangement secured by the securities and no legal opinion shall be required therefor and (y) no representation, warranty, covenant or opinion shall be required for the sale, pledge, hypothecation, transfer or assignment of any LifeMap Shares if a registration statement with respect to the resale of such LifeMap Shares is effective at the time of any such sale, pledge, hypothecation, transfer or assignment.

(ii) As a condition precedent to the registration of transfer of any certificates representing LifeMap Shares upon the exercise of this Option or transfer of LifeMap Shares, the Company and LifeMap shall be entitled to obtain a letter or other instrument from the Purchaser containing such covenants, representations or warranties by such Purchaser similar to those contained in this Section 4 as reasonably deemed necessary by the Company or LifeMap to effect compliance by the Company or LifeMap with the requirements of the 1933 Act and any other applicable federal and/or state securities laws.

(iii) Any sale, pledge, hypothecation, transfer, or assignment of this Option or LifeMap Shares in violation of the foregoing restrictions shall be deemed null and void and of no binding effect.

(iv) The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares not made pursuant to registration under the 1933 Act and applicable state securities laws, or pursuant to an available exemption from registration under the 1933 Act and applicable state securities laws.

(v) The LifeMap Shares shall bear an appropriate legend, conspicuously disclosing the restrictions on transfer, under this Section 4, until the same are registered for sale under the 1933 Act or are transferred in a transaction exempt from registration under the 1933 Act entitling the transferee to receive securities that are not deemed to be "restricted securities" as such term is defined in Rule 144 under the 1933 Act. The Company agrees that upon the sale of LifeMap Shares pursuant to a registration statement or an exemption entitling the transferee to receive securities that are not deemed to be "restricted securities," or at such time as registration under the 1933 Act shall no longer be required, upon the presentation of the certificates containing such a legend to the transfer agent or warrant agent, if any, it will request removal of such legend; provided, that unless the request for removal of the legend is in connection with a sale registered under the 1933 Act, the Purchaser shall have provided an opinion of counsel, acceptable to the Company and the Transfer Agent to the effect that such legend may be removed in compliance with the 1933 Act.

(c) Investment Representations. Each Purchaser makes the following representations, severally and not jointly and severally, in connection with its acquisition of this Option and any LifeMap Shares upon the exercise of this Option:

(i) Purchaser has made such investigation of LifeMap as Purchaser deemed appropriate for determining to acquire (and thereby make an investment in) this Option and LifeMap Shares, and in making such investigation Purchaser has had access to such financial and other information concerning LifeMap as Purchaser requested. Purchaser is relying on the information communicated to Purchaser in writing by LifeMap or the Company. Purchaser has not relied on any statement or representations inconsistent with those communicated to Purchaser in writing by LifeMap or the Company. Purchaser has had a reasonable opportunity to ask questions of and receive answers from the executive officers of LifeMap and the Company concerning LifeMap, and to obtain additional information, to the extent possessed or obtainable by LifeMap or the Company without unreasonable effort or expense, necessary to verify the information communicated or provided to Purchaser. All such questions have been answered to Purchaser's satisfaction.

(ii) Purchaser is acquiring this Option and upon exercise of this Option will purchase LifeMap Shares solely for Purchaser's own account, and Purchaser has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of the LifeMap Shares or this Option; provided, that this representation and warranty shall not prohibit Purchaser from selling LifeMap Shares in the ordinary course of business pursuant to a registration statement under the 1933 Act or otherwise in compliance with the 1933 Act and applicable state securities or "blue sky" laws.

(iii) Purchaser is an "accredited investor" as defined in Rule 501 under the 1933 Act.

(iv) Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in this Option and LifeMap Shares, and has so evaluated the merits and risks of such investment. Such Purchaser is able to bear the economic risk of an investment in this Option and LifeMap Shares and, at the present time, is able to afford a complete loss of such investment.

5. **REGISTRATION RIGHTS.** The Company hereby covenants and agrees that in the event the Company receives any registration rights from LifeMap in respect of any shares of Common Stock owned by the Company, simultaneously with the exercise of any such registration rights at any time that this Option remains exercisable in whole or in part, the Company shall cause LifeMap to register all of the LifeMap Shares issuable to the Purchaser as of the applicable date of determination pursuant to the terms of this Option. The Company acknowledges and agrees that prior to excluding any LifeMap Shares from any registration statement, it shall first exclude all other shares of Common Stock owned by the Company other than any shares of Common Stock that are subject to an option provided to another Purchaser (as defined in the Securities Purchase Agreement) which shall be subject to exclusion on a pro rata basis with all other Purchasers (as defined in the Securities Purchase Agreement). The Company shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, including, without limitation, any assignment of any registration rights with respect to the Common Stock purchasable pursuant to this Option granted to the Company under any registration rights agreement by LifeMap and the Company or under any registration statement, as Purchaser may reasonably request in order to carry out the intent and accomplish the purposes of this Section 5.

6. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Incorporation, Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Option, and will at all times in good faith carry out all the provisions of this Option and take all action as may be required to protect the rights of the Purchaser. Without limiting the generality of the foregoing, the Company shall continue to hold a sufficient number of LifeMap Shares to permit Purchaser to exercise this Option in full. The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares in violation of the immediately preceding sentence.

7. PURCHASER NOT DEEMED A LIFEMAP SHAREHOLDER. The Purchaser, solely in such Person's capacity as the holder of this Option, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of LifeMap for any purpose, nor shall anything contained in this Option be construed to confer upon the Purchaser, solely in such Person's capacity as the holder of this Option, any of the rights of a shareholder of LifeMap or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the purchase of the LifeMap Shares through the due exercise of this Option. In addition, nothing contained in this Option shall be construed as imposing any liabilities on the Purchaser to purchase any securities or as a shareholder of the Company or LifeMap (other than upon exercise of this Option), whether such liabilities are asserted by the Company or LifeMap or by their respective creditors. Notwithstanding this Section, the Company shall provide the Purchaser with copies of such notices and other information given to the Common Stock holders of LifeMap generally, promptly after receipt thereof by the Company, unless the Company believes that such information is material, nonpublic information regarding the Company or LifeMap.

8. NOTICES. Any notice pursuant to this Agreement by the Purchaser to the Company shall be in writing and shall be delivered in person, or mailed first class, postage prepaid, or sent by air delivery service or by facsimile transmission (FAX) or email to the Company, at its office, Attention: Chief Financial Officer. The address of the principal office of the Company is 1301 Harbor Bay Parkway, Alameda, California 94502; FAX (510) 521-3389; email rpeabody@biotimemail.com. Any notice given pursuant to this Agreement by the Company to the Purchaser shall be in writing and shall be mailed first class, postage prepaid, or sent by air delivery service, or by facsimile transmission (FAX) or email or otherwise delivered to the Purchaser at the Purchaser's address shown on the signature page of this Option. Each party hereto may from time to time change the address to which notices to it are to be delivered or mailed hereunder by notice to the other party.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Option may only be amended by a written instrument signed by the Company and the Purchaser.

10. GOVERNING LAW; JURISDICTION. This Option shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Option shall be governed by, the internal laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of California. The Company and the Purchaser hereby irrevocably submit to the non-exclusive jurisdiction of the state and federal courts sitting in the City of New York and the County of Alameda and the United States District Court for the Northern District of California for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper.

11. CONSTRUCTION; HEADINGS. This Option shall be deemed to be jointly drafted by the Company and Purchaser and shall not be construed against any Person as the drafter hereof. The headings of this Option are for convenience of reference and shall not form part of, or affect the interpretation of, this Option.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares purchasable upon cancellation of Warrants in connection with the exercise of this Option, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Purchaser. If the Purchaser and the Company are unable to agree upon such determination or calculation of the Exercise Price or the LifeMap Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Purchaser, then the Company shall, within two (2) Business Days submit via facsimile (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Purchaser or (b) the disputed arithmetic calculation of the LifeMap Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Purchaser of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Option shall be cumulative and in addition to all other remedies available under this Option, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Purchaser to pursue actual damages for any failure by the Company to comply with the terms of this Option.



14. SEVERABILITY. If any provision of this Option is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Option so long as this Option as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

15. COMPANY'S REPRESENTATIONS AND WARRANTIES. The Company has the power and authority to execute and deliver this Option and to perform all of its obligations hereunder. This Option has been duly authorized, executed and delivered by the Company and is the valid and binding agreement of the Company, enforceable in accordance with its terms subject to: (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors; and (ii) general principles of equity. Neither the Company, nor any of its Affiliates, nor any person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause the offering of the Option or the LifeMap Shares to be integrated with prior offerings by the Company or LifeMap for purposes of registration of any of the LifeMap Shares under the 1933 Act or of any applicable shareholder approval provisions of the NYSE MKT. There is no lawsuit, arbitration proceeding, or administrative action or proceeding pending or threatened against the Company which questions the validity of this Option or any action taken or to be taken by the Company in connection with this Option or the transfer of the LifeMap Shares hereunder. The execution and delivery of this Option and consummation of the transactions contemplated by this Option (a) do not and will not violate any provisions of (i) any rule, regulation, statute, or law, (ii) the terms of any order, writ or decree of any court or judicial or regulatory authority or body, (iii) the Articles of Incorporation or bylaws of the Company, or (iv) the rules and regulations of the NYSE MKT applicable to the listing of the Company's common shares, (b) will not conflict with or result in a breach of any condition or provision or constitute a default under or pursuant to the terms of any Material Contract (as defined in the Securities Purchase Agreement), and (c) will not result in the creation or imposition of any lien, charge or encumbrance upon any of the LifeMap Shares (other than pursuant to this Option) or upon any of the assets or properties of the Company.

16. CERTAIN DEFINITIONS. For purposes of this Option, the following terms shall have the following meanings:

(a) "**1933 Act**" means the Securities Act of 1933, as amended.

(b) "**Affiliate**" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(c) "**Attribution Parties**" means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Purchaser's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Purchaser or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a "group" within the meaning of Section 13(d) of the Exchange Act and Rule 13d-5 thereunder, together with the Purchaser or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the Purchaser's and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Purchaser and all other Attribution Parties to the Maximum Percentage.

(d) "**Bloomberg**" means Bloomberg Financial Markets.

(e) "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) "**Closing Bid Price**" and "**Closing Sale Price**" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg. If the Company and the Purchaser are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(g) "**Common Stock**" means (i) the Common Stock, no par value per share, of LifeMap, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

(h) "**Eligible Market**" means the NYSE, the NYSE MKT, The NASDAQ Global Market, The NASDAQ Global Select Market, the NASDAQ Capital Market, or the OTC Bulletin Board.

(i) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

(j) "**Expiration Date**" has the meaning ascribed in Section 1, provided, that, if June 5, 2016 falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a "**Holiday**"), the next day that is not a Holiday shall apply.

(k) **"Person"** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(l) **"Principal Market"** means the principal Eligible Market on which the Common Stock trades.

(m) **"Trading Day"** means any day on which the Common Stock is traded on the Principal Market, provided that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time).

**[Signature Page Follows]**

**IN WITNESS WHEREOF**, the Company and Purchaser have caused this Option Agreement to be duly executed as of the Effective Date.

**BIOTIME, INC.**

By: /s/ Robert W. Peabody

Name: Robert W. Peabody

Title: Sr. VP

**PURCHASER**

\_\_\_\_\_

By: /s/ Patrick Lin

Name: Patrick Lin

Title:

\_\_\_\_\_

**EXERCISE NOTICE**  
**TO BE EXECUTED BY THE REGISTERED PURCHASER TO EXERCISE THIS**  
**OPTION TO PURCHASE LIFEMAP COMMON STOCK**

**BIOTIME, INC.**

The undersigned Purchaser hereby exercises the right to purchase \_\_\_\_\_ shares of Common Stock ("**LifeMap Shares**") of LifeMap Sciences, Inc., a California corporation, held by BioTime, Inc. (the "**Company**"), pursuant to the attached Option Agreement and:

Check One:

\_\_\_ A. Tenders herewith payment of the Aggregate Option Exercise Price in full in the form of a bank wire transfer to the account of the Company in the amount of \$ \_\_\_\_\_;

or

\_\_\_ B. Hereby cancels that number of Warrants required to be cancelled in lieu of cash in a Cashless Exercise pursuant to Section 2(d) of the Option Agreement.

Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Option Agreement.

Date: \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Name of Registered Purchaser

By: \_\_\_\_\_

Name:

Title:

[NOTE: The above signature should correspond exactly with the name of the Purchaser in the Option Agreement]

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**ACKNOWLEDGMENT**

The Company hereby acknowledges this Exercise Notice and hereby directs [Transfer Agent] to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated from the Company and acknowledged and agreed to by [Transfer Agent].

**BIOTIME, INC.**

By: \_\_\_\_\_  
Name:  
Title:

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## OPTION AGREEMENT

This Option Agreement ("Option") is entered into as of June 6, 2013 (the "**Effective Date**") by BioTime, Inc., a California corporation (the "**Company**"), and Anthony Low-Beer (the "**Purchaser**") in connection that certain Stock and Warrant Purchase Agreement, dated June 3, 2013, between the Company and Purchaser (the "**Securities Purchase Agreement**").

### 1. GRANT OF OPTION.

(a) Option. The Company hereby grants to Purchaser the option (the "**Option**"), in lieu of exercising some or all of the Warrants to purchase shares of common stock of the Company issued to the Purchaser pursuant to the Securities Purchase Agreement dated as of even date herewith (the "**Warrants**" and the certificate representing such Warrants, the "**Warrant Certificate**"), to cancel each such unexercised Warrant and purchase from the Company, at the Exercise Price (as defined below) then in effect, one (1) share of Common Stock of LifeMap Sciences, Inc. ("**LifeMap**") owned by BioTime, subject to adjustment as provided herein (the "**LifeMap Shares**"), free of any liens and charges and preemptive or similar rights. The Option shall expire if not exercised on or before the earlier to occur of (a) 5:00 p.m. New York time on June 5, 2016 and (b) the date on which all of the Warrants (as defined below) shall have been exercised in full, or sold or transferred otherwise than in a sale or transfer described in Section 4(a) (the "**Expiration Date**").

(b) Minimum Exercise. This Option may be exercised by Purchaser in whole or in part; provided, however, that any partial exercise of this Option shall not be for less than the lower of (i) 10,000 LifeMap Shares and (ii) all of the remaining LifeMap Shares that are issuable as of the applicable date of determination upon the exercise of the Option held by the Purchaser pursuant to the terms hereof.

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## 2. EXERCISE OF OPTION

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(b) and Section 4), this Option may be exercised by the Purchaser at any time or times on or after the Effective Date, in whole or in part, subject to Section 1(b), by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the "**Exercise Notice**"), duly completed and executed by Purchaser, stating Purchaser's election to exercise this Option, the number of Warrants being cancelled upon exercise of this Option and the number of LifeMap Shares being purchased, and (ii) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of LifeMap Shares purchasable upon cancellation of one Warrant multiplied by the number of Warrants being cancelled (the "**Aggregate Option Exercise Price**") by wire transfer of immediately available funds, or, if the provisions of Section 2(d) are applicable, (B) by notifying the Company that the Option is being exercised pursuant to a Cashless Exercise (as defined in Section 2(d)). The Holder shall not be required to deliver the original Warrant Certificate in order to effect an exercise hereunder. However, once the Option has been exercised in full, following the final exercise thereof, the Holder shall promptly return the original Warrant Certificate to the Company for cancellation. Execution and delivery of the Exercise Notice with respect to less than all of the Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option). On or before the first (1<sup>st</sup>) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile an acknowledgment of confirmation of receipt of the Exercise Notice to the Purchaser and the transfer agent of the LifeMap Shares (the "**Transfer Agent**"), if any. On or before the third (3<sup>rd</sup>) Trading Day following the date on which the Company has received the Exercise Notice, so long as the Purchaser delivers Aggregate Option Exercise Price (or, if applicable, notice of a Cashless Exercise) on or prior to the second (2<sup>nd</sup>) Trading Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**") (provided that if the Aggregate Option Exercise Price has not been delivered by such date, the Share Delivery Date shall be one (1) Trading Day after the Aggregate Option Exercise Price is delivered), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program, credit such aggregate number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise to the Purchaser's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, or if there is no Transfer Agent, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in LifeMap's share in the name of the Purchaser or its designee, for the number of LifeMap Shares to which the Purchaser is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the transfer of LifeMap Shares to the Purchaser via DTC, if any. No fractional LifeMap Shares are to be issued upon the exercise of this Option, but rather the number of LifeMap Shares to be issued shall be rounded down to the nearest whole number and the Company shall refund in cash to Purchaser the portion of the Exercise Price allocable to the fraction of a LifeMap Share not issued. The Company shall pay any and all taxes which may be payable with respect to the transfer of LifeMap Shares to the Purchaser upon exercise of this Option.

(b) Exercise Price. "**Exercise Price**" means the price payable for the purchase of each LifeMap Share upon cancellation of a Warrant in connection with exercise of this Option, which shall initially be \$4.00, and shall be subject to adjustment as provided herein.

(c) Reissue of Warrant Certificate. Upon the exercise of this Option in part, and provided that Purchaser shall have delivered the Warrant Certificate(s) to the Company as permitted under Section 2(a), to the extent that Purchaser continues to hold any unexercised Warrants, the Company shall issue to Purchaser a replacement Warrant Certificate for the number of Warrants that remain unexercised after taking into account the partial exercise of the Option.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if the Common Stock is then traded on an Eligible Market and a registration statement under the 1933 Act permitting the resale of the LifeMap Shares is not in effect under the 1933 Act, the Purchaser may, in its sole discretion, exercise this Option in whole or in part by electing in lieu of paying the Aggregate Option Exercise Price in cash, to receive upon such exercise the "Net Number" of LifeMap Shares determined according to the following formula (a "**Cashless Exercise**"):



$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A= the total number of LifeMap Shares with respect to which this Option is then being exercised as stated in the Exercise Notice.

B= the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the date of the Exercise Notice.

C= the Exercise Price then in effect at the time of such exercise.

In such event, a number of Warrants equal to the Warrants that would be cancelled if such exercise was effected by paying the Exercise Price in cash shall be cancelled, and the number of Warrants remaining for exercise by Purchaser shall be reduced by the number of Warrants so cancelled, and execution and delivery of the Exercise Notice with respect to less than all of the LifeMap Shares purchasable pursuant to this Option shall have the same effect as cancellation of the original Warrant Certificate and issuance of a new Warrant Certificate evidencing the remaining number of Warrants (after deduction of the number of Warrants cancelled in connection with the exercise of the Option).

(e) Company's Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to transfer to the Purchaser, or cause LifeMap to issue, on or prior to the Share Delivery Date, a certificate for the number of LifeMap Shares to which the Purchaser is entitled and cause such LifeMap Shares to be registered on LifeMap's share register or to credit the Purchaser's balance account with DTC for such number of LifeMap Shares to which the Purchaser is entitled upon the Purchaser's exercise of this Option, as applicable, then, in addition to all other remedies available to the Purchaser, the Company (X) shall pay in cash to the Purchaser on each day after such third (3<sup>rd</sup>) Trading Day that the transfer of such LifeMap Shares is not timely effected an amount equal to 1.5% of the product of (A) the sum of the number of LifeMap Shares not transferred to the Purchaser on a timely basis and to which the Purchaser is entitled and (B) the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the last possible date which the Company could have transferred such LifeMap Shares to the Purchaser without violating Section 2(a), or if the LifeMap Shares are then not traded on an Eligible Market, the Exercise Price, and (Y) the Purchaser, upon written notice to the Company, may void its Exercise Notice with respect to, and retain or have returned, as the case may be, any Warrants cancelled in connection with such voided exercise; provided that the voiding of an exercise shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 2(e) or otherwise. In addition to the foregoing, if on or prior to the Share Delivery Date, the Company shall fail to transfer, or cause LifeMap to issue, a certificate to the Purchaser and cause the registration of such LifeMap Shares on LifeMap's share register or credit the Purchaser's balance account with DTC for the number of shares of Common Stock to which the Purchaser is entitled upon the Purchaser's exercise hereunder or pursuant to the Company's obligation pursuant to clause (ii) below, as applicable, and if on or after such Trading Day the Purchaser purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Purchaser of shares of Common Stock issuable upon such exercise that the Purchaser anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, within three (3) Trading Days after the Purchaser's request and in the Purchaser's discretion, either (i) pay cash to the Purchaser in an amount equal to the Purchaser's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to deliver such certificate (and to transfer LifeMap Shares) or credit such Purchaser's balance account with DTC for such LifeMap Shares shall terminate, or (ii) promptly honor its obligation to deliver to the Purchaser a certificate or certificates representing such shares of Common Stock or credit such Purchaser's balance account with DTC and pay cash to the Purchaser in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the Closing Bid Price on the date of exercise. Nothing shall limit the Purchaser's right to pursue a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing LifeMap Shares (or to electronically deliver such LifeMap Shares) upon the exercise of this Option as required pursuant to the terms hereof.

(f) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares, the Company shall promptly transfer to the Purchaser the number of LifeMap Shares that are not disputed and resolve such dispute in accordance with Section 12.

3. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF LIFEMAP SHARES. The Exercise Price and the number of LifeMap Shares purchasable hereunder shall be adjusted from time to time as follows:

(a) Prorata Adjustments. If LifeMap, at any time after the Effective Date, shall (A) pay a dividend in Common Stock or make a distribution in Common Stock, (B) subdivide its outstanding Common Stock, (C) combine its outstanding Common Stock into a smaller number of shares of Common Stock or (D) reclassify or change (including a change to the right to receive, or a change into, as the case may be (other than with respect to a merger or consolidation pursuant to the exercise of appraisal rights), shares of stock, other securities, property, cash or any combination thereof) its Common Stock (including any such reclassification or change in connection with a consolidation or merger in which LifeMap is the surviving corporation), the number of LifeMap Shares purchasable hereunder upon cancellation of each Warrant in connection with the exercise of this Option immediately prior thereto shall be adjusted so that the Purchaser shall be entitled to receive from the Company the kind and number of shares of Common Stock or other securities of LifeMap or other property which the Purchaser would have owned or have been entitled to receive after the happening of any of the events described above, had such Warrant been cancelled in connection with the exercise of this Option immediately prior to the happening of such event or any record date with respect thereto. An adjustment made pursuant to this paragraph shall become effective immediately after the effective date of such event retroactive to the record date, if any, for such event.

(b) Options, Warrants and Rights. If LifeMap at any time after the Effective Date, shall issue rights, options or warrants to all holders of its outstanding Common Stock, without any charge to such holders, entitling them to subscribe for or purchase Common Stock at a price per share which is lower at the record date mentioned below than the then Current Market Price (as defined in paragraph (d) below) per share of the Common Stock, the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of additional shares of Common Stock offered for subscription or purchase in connection with such rights, options or warrants, and of which the denominator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of shares which the aggregate exercise price of the total number of shares of Common Stock issuable upon exercise of such rights, options or warrants would purchase at the Current Market Price per share of the Common Stock (as determined pursuant to paragraph (d) below) at such record date. Such adjustment shall be made whenever such rights, options or warrants are issued, and shall become effective immediately after the record date for the determination of stockholders entitled to receive such rights, options or warrants

(c) Distribution of Indebtedness or Assets. If LifeMap at any time after the Effective Date, shall distribute to all holders of its Common Stock (including any distribution made in connection with a merger in which LifeMap is the surviving corporation) evidences of its indebtedness or assets (excluding cash, dividends or distributions payable out of consolidated earnings or earned surplus and dividends or distributions referred to in paragraph (a) above) or rights, options or warrants, or convertible or exchangeable securities containing the right to subscribe for or purchase Common Stock (excluding those referred to in paragraph (b) above), then in each case the number of LifeMap Shares thereafter purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be determined by multiplying the number of LifeMap Shares theretofore purchasable upon cancellation of each Warrant in connection with the exercise of this Option by a fraction, of which the numerator shall be the then Current Market Price per share of Common Stock (as determined pursuant to paragraph (d) below) on the date of such distribution, and of which the denominator shall be the then Current Market Price per share of Common Stock, less the then fair value (as determined in good faith by the Board of Directors of the Company whose determination shall be conclusive) of the portion of the assets or evidences of indebtedness so distributed or of such subscription rights, options or warrants, or of such convertible or exchangeable securities applicable to one LifeMap Share. Such adjustment shall be made whenever any such distribution is made, and shall become effective on the date of distribution retroactive to the record date for the determination of shareholders entitled to receive such distribution.

(d) Current Market Price. For the purpose of any computation under paragraphs (b) and (c) of this Section, the "Current Market Price" per share of Common Stock at any date shall be the average of the daily Closing Sale Prices for the 20 consecutive Trading Days ending one Trading Day prior to the date of such computation. If the Current Market Price of the Common Stock cannot be so determined, the Board of Directors of the Company shall reasonably determine in good faith the Current Market Price on the basis of such quotations or other sales information as is available.

(e) Minimum Adjustment. No adjustment pursuant to paragraphs (b) and (c) of this Section 3 in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall be required unless such adjustment would require an increase or decrease of at least one percent (1%) in the number of LifeMap Shares purchasable upon cancellation of such Warrant; provided, however, that any adjustments which by reason of this paragraph (e) are not required to be made shall be carried forward and taken into account in the determination of any subsequent adjustment. All calculations shall be made with respect to the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option, to the nearest tenth of a share and with respect to the Exercise Price payable hereunder, to the nearest whole cent.

(f) Adjustment of Exercise Price. Whenever the number of LifeMap Shares purchasable upon the exercise of this Option is adjusted, as herein provided, the Exercise Price payable upon exercise of this Option shall be adjusted by multiplying such Exercise Price immediately prior to such adjustment by a fraction, of which the numerator shall be the number of LifeMap Shares purchasable upon the exercise of this Option immediately prior to such adjustment, and of which the denominator shall be the number of LifeMap Shares purchasable immediately thereafter.

(g) Distribution in Lieu of Adjustment. No adjustment in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option need be made under paragraphs (b) and (c) of this Section 3 if the Company delivers to the Purchaser the rights options, warrants, or convertible or exchangeable securities, or evidences of indebtedness or assets referred to in those paragraphs which the Purchaser would have been entitled to receive had this Option been exercised in full prior to the happening of such event or the record date with respect thereto. No adjustment need be made for a change in the par value of the LifeMap Shares.

(h) Notice of Adjustment. Whenever the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or the Exercise Price of such LifeMap Shares is adjusted, as herein provided, the Company shall promptly, in any event within ten (10) days send to the Purchaser notice of such adjustment or adjustments. Such notice shall set forth the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option and the Exercise Price of such LifeMap Shares after such adjustment, setting forth a brief statement of the facts requiring such adjustment and setting forth the computation by which such adjustment was made.

(i) No Adjustment for Dividends. Except as provided in this Section 3, no adjustment in respect of any dividends shall be made during the term of this Option or upon the exercise of this Option.

(j) Readjustment of Number of LifeMap Shares and Exercise Price; Certain Limitations. If an adjustment of the number of LifeMap Shares purchasable upon cancellation of each Warrant or the Exercise Price has been made as a result of the issuance of rights, options or warrants as provided in paragraph (b), or rights, options or warrants or convertible or exchangeable securities as provided in paragraph (c), of this Section 3, upon the expiration of any such rights, options, or warrants, or conversion or exchange privileges under convertible or exchangeable securities, without exercise thereof, the Exercise Price and the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option shall, upon such expiration, be readjusted and shall thereafter be such as it would have been had it been originally adjusted (or had the original adjustment not been required, as the case may be) as if (A) the only shares of Common Stock so issued were the shares of Common Stock, if any, actually issued or sold upon the exercise of such rights, options, warrants, or conversion or exchange rights and (B) such shares of Common Stock, if any, were issued or sold for the consideration actually received by LifeMap upon such exercise plus the aggregate consideration, if any, actually received by LifeMap for the issuance, sale or grant of all such rights, options, warrants, or conversion or exchange rights whether or not exercised. Except as provided in this paragraph, no reduction in the number of LifeMap Shares purchasable upon cancellation of each Warrant in connection with the exercise of this Option or increase in the Exercise Price shall be made as a result of the issuance or distribution of rights, options or warrants, or convertible or exchangeable securities as described in paragraphs (b) or (c) of this Section 3.

#### 4. RESTRICTIONS ON TRANSFER.

(a) Transfer. This Option is personal to the Purchaser and may not be sold, transferred or assigned, except (i) to a successor in interest of the Purchaser as a result of any consolidation of the Purchaser with or merger of the Purchaser into another Person, (ii) to another Purchaser (as defined in the Securities Purchase Agreement) or (iii) to another Person as part of a sale of all or substantially all the property of the Purchaser to such other Person.

(b) Restrictions on Transfer of LifeMap Shares.

(i) Any LifeMap Shares purchased by Purchaser upon the exercise of this Option, may not be sold, pledged, hypothecated, transferred or assigned, in whole or in part, unless (A) a registration statement under the 1933 Act and under any applicable state securities laws is effective therefor or (B) an exemption from such registration is then available and an opinion of counsel, reasonably acceptable to LifeMap and the Transfer Agent, if any, has been rendered stating that such sale, pledge, hypothecation, transfer or assignment will not violate the 1933 Act. Notwithstanding anything to the contrary contained herein (x) the LifeMap Shares may be pledged in connection with a bona fide margin account or other loan or financing arrangement secured by the securities and no legal opinion shall be required therefor and (y) no representation, warranty, covenant or opinion shall be required for the sale, pledge, hypothecation, transfer or assignment of any LifeMap Shares if a registration statement with respect to the resale of such LifeMap Shares is effective at the time of any such sale, pledge, hypothecation, transfer or assignment.

(ii) As a condition precedent to the registration of transfer of any certificates representing LifeMap Shares upon the exercise of this Option or transfer of LifeMap Shares, the Company and LifeMap shall be entitled to obtain a letter or other instrument from the Purchaser containing such covenants, representations or warranties by such Purchaser similar to those contained in this Section 4 as reasonably deemed necessary by the Company or LifeMap to effect compliance by the Company or LifeMap with the requirements of the 1933 Act and any other applicable federal and/or state securities laws.

(iii) Any sale, pledge, hypothecation, transfer, or assignment of this Option or LifeMap Shares in violation of the foregoing restrictions shall be deemed null and void and of no binding effect.

(iv) The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares not made pursuant to registration under the 1933 Act and applicable state securities laws, or pursuant to an available exemption from registration under the 1933 Act and applicable state securities laws.

(v) The LifeMap Shares shall bear an appropriate legend, conspicuously disclosing the restrictions on transfer, under this Section 4, until the same are registered for sale under the 1933 Act or are transferred in a transaction exempt from registration under the 1933 Act entitling the transferee to receive securities that are not deemed to be "restricted securities" as such term is defined in Rule 144 under the 1933 Act. The Company agrees that upon the sale of LifeMap Shares pursuant to a registration statement or an exemption entitling the transferee to receive securities that are not deemed to be "restricted securities," or at such time as registration under the 1933 Act shall no longer be required, upon the presentation of the certificates containing such a legend to the transfer agent or warrant agent, if any, it will request removal of such legend; provided, that unless the request for removal of the legend is in connection with a sale registered under the 1933 Act, the Purchaser shall have provided an opinion of counsel, acceptable to the Company and the Transfer Agent to the effect that such legend may be removed in compliance with the 1933 Act.

(c) Investment Representations. Each Purchaser makes the following representations, severally and not jointly and severally, in connection with its acquisition of this Option and any LifeMap Shares upon the exercise of this Option:

(i) Purchaser has made such investigation of LifeMap as Purchaser deemed appropriate for determining to acquire (and thereby make an investment in) this Option and LifeMap Shares, and in making such investigation Purchaser has had access to such financial and other information concerning LifeMap as Purchaser requested. Purchaser is relying on the information communicated to Purchaser in writing by LifeMap or the Company. Purchaser has not relied on any statement or representations inconsistent with those communicated to Purchaser in writing by LifeMap or the Company. Purchaser has had a reasonable opportunity to ask questions of and receive answers from the executive officers of LifeMap and the Company concerning LifeMap, and to obtain additional information, to the extent possessed or obtainable by LifeMap or the Company without unreasonable effort or expense, necessary to verify the information communicated or provided to Purchaser. All such questions have been answered to Purchaser's satisfaction.

(ii) Purchaser is acquiring this Option and upon exercise of this Option will purchase LifeMap Shares solely for Purchaser's own account, and Purchaser has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of the LifeMap Shares or this Option; provided, that this representation and warranty shall not prohibit Purchaser from selling LifeMap Shares in the ordinary course of business pursuant to a registration statement under the 1933 Act or otherwise in compliance with the 1933 Act and applicable state securities or "blue sky" laws.

(iii) Purchaser is an "accredited investor" as defined in Rule 501 under the 1933 Act.

(iv) Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in this Option and LifeMap Shares, and has so evaluated the merits and risks of such investment. Such Purchaser is able to bear the economic risk of an investment in this Option and LifeMap Shares and, at the present time, is able to afford a complete loss of such investment.

5. **REGISTRATION RIGHTS.** The Company hereby covenants and agrees that in the event the Company receives any registration rights from LifeMap in respect of any shares of Common Stock owned by the Company, simultaneously with the exercise of any such registration rights at any time that this Option remains exercisable in whole or in part, the Company shall cause LifeMap to register all of the LifeMap Shares issuable to the Purchaser as of the applicable date of determination pursuant to the terms of this Option. The Company acknowledges and agrees that prior to excluding any LifeMap Shares from any registration statement, it shall first exclude all other shares of Common Stock owned by the Company other than any shares of Common Stock that are subject to an option provided to another Purchaser (as defined in the Securities Purchase Agreement) which shall be subject to exclusion on a pro rata basis with all other Purchasers (as defined in the Securities Purchase Agreement). The Company shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, including, without limitation, any assignment of any registration rights with respect to the Common Stock purchasable pursuant to this Option granted to the Company under any registration rights agreement by LifeMap and the Company or under any registration statement, as Purchaser may reasonably request in order to carry out the intent and accomplish the purposes of this Section 5.

6. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Incorporation, Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Option, and will at all times in good faith carry out all the provisions of this Option and take all action as may be required to protect the rights of the Purchaser. Without limiting the generality of the foregoing, the Company shall continue to hold a sufficient number of LifeMap Shares to permit Purchaser to exercise this Option in full. The Company will, and will request that LifeMap will, issue instructions to any Transfer Agent and registrar of the Common Stock to refuse to register the transfer of any LifeMap Shares in violation of the immediately preceding sentence.

7. PURCHASER NOT DEEMED A LIFEMAP SHAREHOLDER. The Purchaser, solely in such Person's capacity as the holder of this Option, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of LifeMap for any purpose, nor shall anything contained in this Option be construed to confer upon the Purchaser, solely in such Person's capacity as the holder of this Option, any of the rights of a shareholder of LifeMap or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the purchase of the LifeMap Shares through the due exercise of this Option. In addition, nothing contained in this Option shall be construed as imposing any liabilities on the Purchaser to purchase any securities or as a shareholder of the Company or LifeMap (other than upon exercise of this Option), whether such liabilities are asserted by the Company or LifeMap or by their respective creditors. Notwithstanding this Section, the Company shall provide the Purchaser with copies of such notices and other information given to the Common Stock holders of LifeMap generally, promptly after receipt thereof by the Company, unless the Company believes that such information is material, nonpublic information regarding the Company or LifeMap.

8. NOTICES. Any notice pursuant to this Agreement by the Purchaser to the Company shall be in writing and shall be delivered in person, or mailed first class, postage prepaid, or sent by air delivery service or by facsimile transmission (FAX) or email to the Company, at its office, Attention: Chief Financial Officer. The address of the principal office of the Company is 1301 Harbor Bay Parkway, Alameda, California 94502; FAX (510) 521-3389; email rpeabody@biotimemail.com. Any notice given pursuant to this Agreement by the Company to the Purchaser shall be in writing and shall be mailed first class, postage prepaid, or sent by air delivery service, or by facsimile transmission (FAX) or email or otherwise delivered to the Purchaser at the Purchaser's address shown on the signature page of this Option. Each party hereto may from time to time change the address to which notices to it are to be delivered or mailed hereunder by notice to the other party.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Option may only be amended by a written instrument signed by the Company and the Purchaser.



10. GOVERNING LAW; JURISDICTION. This Option shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Option shall be governed by, the internal laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of California. The Company and the Purchaser hereby irrevocably submit to the non-exclusive jurisdiction of the state and federal courts sitting in the City of New York and the County of Alameda and the United States District Court for the Northern District of California for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper.

11. CONSTRUCTION; HEADINGS. This Option shall be deemed to be jointly drafted by the Company and Purchaser and shall not be construed against any Person as the drafter hereof. The headings of this Option are for convenience of reference and shall not form part of, or affect the interpretation of, this Option.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the LifeMap Shares purchasable upon cancellation of Warrants in connection with the exercise of this Option, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Purchaser. If the Purchaser and the Company are unable to agree upon such determination or calculation of the Exercise Price or the LifeMap Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Purchaser, then the Company shall, within two (2) Business Days submit via facsimile (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Purchaser or (b) the disputed arithmetic calculation of the LifeMap Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Purchaser of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Option shall be cumulative and in addition to all other remedies available under this Option, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Purchaser to pursue actual damages for any failure by the Company to comply with the terms of this Option.

14. SEVERABILITY. If any provision of this Option is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Option so long as this Option as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

15. COMPANY'S REPRESENTATIONS AND WARRANTIES. The Company has the power and authority to execute and deliver this Option and to perform all of its obligations hereunder. This Option has been duly authorized, executed and delivered by the Company and is the valid and binding agreement of the Company, enforceable in accordance with its terms subject to: (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors; and (ii) general principles of equity. Neither the Company, nor any of its Affiliates, nor any person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause the offering of the Option or the LifeMap Shares to be integrated with prior offerings by the Company or LifeMap for purposes of registration of any of the LifeMap Shares under the 1933 Act or of any applicable shareholder approval provisions of the NYSE MKT. There is no lawsuit, arbitration proceeding, or administrative action or proceeding pending or threatened against the Company which questions the validity of this Option or any action taken or to be taken by the Company in connection with this Option or the transfer of the LifeMap Shares hereunder. The execution and delivery of this Option and consummation of the transactions contemplated by this Option (a) do not and will not violate any provisions of (i) any rule, regulation, statute, or law, (ii) the terms of any order, writ or decree of any court or judicial or regulatory authority or body, (iii) the Articles of Incorporation or bylaws of the Company, or (iv) the rules and regulations of the NYSE MKT applicable to the listing of the Company's common shares, (b) will not conflict with or result in a breach of any condition or provision or constitute a default under or pursuant to the terms of any Material Contract (as defined in the Securities Purchase Agreement), and (c) will not result in the creation or imposition of any lien, charge or encumbrance upon any of the LifeMap Shares (other than pursuant to this Option) or upon any of the assets or properties of the Company.

16. CERTAIN DEFINITIONS. For purposes of this Option, the following terms shall have the following meanings:

(a) "**1933 Act**" means the Securities Act of 1933, as amended.

(b) "**Affiliate**" means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that "control" of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(c) "**Attribution Parties**" means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Purchaser's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Purchaser or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a "group" within the meaning of Section 13(d) of the Exchange Act and Rule 13d-5 thereunder, together with the Purchaser or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company's Common Stock would or could be aggregated with the Purchaser's and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Purchaser and all other Attribution Parties to the Maximum Percentage.

(d) "**Bloomberg**" means Bloomberg Financial Markets.

(e) "**Business Day**" means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) "**Closing Bid Price**" and "**Closing Sale Price**" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg. If the Company and the Purchaser are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(g) "**Common Stock**" means (i) the Common Stock, no par value per share, of LifeMap, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

(h) "**Eligible Market**" means the NYSE, the NYSE MKT, The NASDAQ Global Market, The NASDAQ Global Select Market, the NASDAQ Capital Market, or the OTC Bulletin Board.

(i) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

(j) "**Expiration Date**" has the meaning ascribed in Section 1, provided, that, if June 5, 2016 falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a "**Holiday**"), the next day that is not a Holiday shall apply.

(k) **"Person"** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(l) **"Principal Market"** means the principal Eligible Market on which the Common Stock trades.

(m) **"Trading Day"** means any day on which the Common Stock is traded on the Principal Market, provided that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time).

**[Signature Page Follows]**

IN WITNESS WHEREOF, the Company and Purchaser have caused this Option Agreement to be duly executed as of the Effective Date.

**BIOTIME, INC.**

By: /s/ Robert W. Peabody

Name: Robert W. Peabody

Title: Sr. VP

**PURCHASER**

Anthony Low-Beer

By: /s/ Anthony Low-Beer

Name: Anthony Low-Beer

Title:

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**EXERCISE NOTICE**  
**TO BE EXECUTED BY THE REGISTERED PURCHASER TO EXERCISE THIS**  
**OPTION TO PURCHASE LIFEMAP COMMON STOCK**

**BIOTIME, INC.**

The undersigned Purchaser hereby exercises the right to purchase \_\_\_\_\_ shares of Common Stock ("**LifeMap Shares**") of LifeMap Sciences, Inc., a California corporation, held by BioTime, Inc. (the "**Company**"), pursuant to the attached Option Agreement and:

Check One:

\_\_\_ A. Tenders herewith payment of the Aggregate Option Exercise Price in full in the form of a bank wire transfer to the account of the Company in the amount of \$ \_\_\_\_\_;

or

\_\_\_ B. Hereby cancels that number of Warrants required to be cancelled in lieu of cash in a Cashless Exercise pursuant to Section 2(d) of the Option Agreement.

Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Option Agreement.

Date: \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Name of Registered Purchaser

By: \_\_\_\_\_

Name:

Title:

[NOTE: The above signature should correspond exactly with the name of the Purchaser in the Option Agreement]

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**ACKNOWLEDGMENT**

The Company hereby acknowledges this Exercise Notice and hereby directs [Transfer Agent] to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated from the Company and acknowledged and agreed to by [Transfer Agent].

**BIOTIME, INC.**

By: \_\_\_\_\_  
Name:  
Title:

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## CERTIFICATIONS

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: August 9, 2013

/s/ Michael D. West

Michael D. West  
Chief Executive Officer

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## CERTIFICATIONS

I, Robert W. Peabody, 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: August 9, 2013

*/s/ Robert W. Peabody*

Robert W. Peabody  
Chief Financial Officer

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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 June 30, 2013 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: August 9, 2013

/s/ Michael D. West

Michael D. West  
Chief Executive Officer

/s/ Robert W. Peabody

Robert W. Peabody  
Chief Financial Officer

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