

FORM 10-Q
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

(Mark One)

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

For the quarterly period ended March 31, 2011

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. Yes No

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

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<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). Yes No

APPLICABLE ONLY TO CORPORATE ISSUERS:

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date: 48,799,326 common shares, no par value, as of April 25, 2011.

PART 1--FINANCIAL INFORMATION

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

Item 1. Financial Statements

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

	March 31, 2011 <u>(unaudited)</u>	December 31, <u>2010</u>
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 30,136,979	\$ 33,324,924
Inventory	70,660	45,470
Prepaid expenses and other current assets	<u>2,407,270</u>	<u>2,202,284</u>
Total current assets	32,614,909	35,572,678
Equipment, net	1,028,954	710,766
Deferred license and consulting fees	1,330,472	1,550,410
Deposits	65,607	51,900
Intangible assets, net	<u>21,850,289</u>	<u>15,386,905</u>
TOTAL ASSETS	<u>\$ 56,890,231</u>	<u>\$ 53,272,659</u>
LIABILITIES AND EQUITY		
CURRENT LIABILITIES:		
Accounts payable and accrued liabilities	\$ 2,244,320	\$ 1,929,874
Deferred grant income	261,777	261,777
Deferred license revenue, current portion	<u>220,873</u>	<u>288,306</u>
Total current liabilities	2,726,970	2,479,957
LONG-TERM LIABILITIES:		
Deferred license revenue, net of current portion	1,012,289	1,048,757
Deferred rent, net of current portion	27,972	-
Other long-term liabilities	<u>317,750</u>	<u>318,288</u>
Total long-term liabilities	<u>1,358,011</u>	<u>1,367,045</u>
Commitments and contingencies		
EQUITY		
Preferred Shares, no par value, authorized 1,000,000 shares; none issued	-	-
Common shares, no par value, authorized 75,000,000 shares; issued and outstanding shares: 48,797,564 and 47,777,701 at March 31, 2011 and December 31, 2010, respectively	107,852,365	101,135,428
Contributed capital	93,972	93,972
Accumulated other comprehensive income	227,333	897,338
Accumulated deficit	<u>(67,316,641)</u>	<u>(63,954,509)</u>
Total shareholders' equity	40,857,029	38,172,229
Noncontrolling interest	<u>11,948,221</u>	<u>11,253,428</u>
Total equity	<u>52,805,250</u>	<u>49,425,657</u>
TOTAL LIABILITIES AND EQUITY	<u>\$ 56,890,231</u>	<u>\$ 53,272,659</u>

See accompanying notes to the condensed consolidated interim financial statements.

BIOTIME, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(Unaudited)

	Three Months Ended	
	March 31, 2011	March 31, 2010
REVENUES:		
License fees	\$ 104,599	\$ 73,226
Royalties from product sales	215,971	297,000
Grant income	415,611	395,096
Sale of research products	88,448	2,764
Total revenues	824,629	768,086
EXPENSES:		
Research and development	(2,855,669)	(1,159,951)
General and administrative	(1,994,847)	(933,298)
Total expenses	(4,850,516)	(2,093,249)
Loss from operations	(4,025,887)	(1,325,163)
OTHER INCOME/(EXPENSES):		
Interest (expense)/income, net	(82,994)	13,138
Other income, net	164,196	-
Total other income/(expenses), net	81,202	13,138
NET LOSS	(3,944,685)	(1,312,025)
Less: Net loss attributable to the noncontrolling interest	\$ 582,553	\$ 25,261
NET LOSS ATTRIBUTABLE TO BIOTIME, INC.	\$ (3,362,132)	\$ (1,286,764)
Foreign currency translation loss	(670,005)	-
TOTAL COMPREHENSIVE NET LOSS	\$ (4,032,137)	\$ (1,286,764)
BASIC AND DILUTED LOSS PER COMMON SHARE	\$ (0.07)	\$ (0.04)
WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING: BASIC AND DILUTED	48,306,505	33,719,203

See accompanying notes to the condensed consolidated interim financial statements.

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

	Three Months Ended	
	March 31,	March 31,2010
	2011	March 31,2010
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss attributable to BioTime, Inc.	\$ (3,362,132)	\$ (1,286,764)
Adjustments to reconcile net loss attributable to BioTime, Inc. to net cash used in operating activities:		
Depreciation expense	65,244	10,420
Amortization of intangible assets	456,152	-
Amortization of deferred license revenues	(65,661)	(73,226)
Amortization of deferred consulting fees	194,062	-
Amortization of deferred license fees	27,375	-
Amortization of deferred rent	29,745	(1,894)
Stock-based compensation	289,540	138,826
Options issued as independent director compensation	143,796	85,817
Write off of expired inventory	4,008	-
Net loss allocable to noncontrolling interest	(582,553)	(25,261)
Changes in operating assets and liabilities:		
Accounts receivable, net	(118,782)	(1,105)
Grant receivable	261,777	-
Inventory	9,110	(18,198)
Prepaid expenses and other current assets	(313,823)	(29,192)
Accounts payable and accrued liabilities	(617,200)	(26,004)
Other long-term liabilities	(5,563)	-
Deferred revenues	(22,534)	-
Net cash used in operating activities	(3,607,439)	(1,226,581)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of equipment	(295,785)	(34,752)
Payment of license fee	(1,500)	(215,000)
Cash acquired as part of asset purchase, net of cash paid	3,150	-
Cash acquired in connection with merger	5,908	-
Security deposit received	244	4,026
Net cash used in investing activities	(287,983)	(245,726)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from the exercise of stock options from employees	72,853	48,400
Proceeds from the exercise of stock options from director	14,828	-
Proceeds from the exercise of stock options from outside consultant	2,350	70,000
Proceeds from the exercise of warrants	386,300	337,888
Proceeds from sale of common shares of subsidiary	213,500	-
Cash provided by financing activities	689,831	456,288
Effect of exchange rate changes on cash and cash equivalents	17,646	-
NET CHANGE IN CASH AND CASH EQUIVALENTS:	(3,187,945)	(1,016,019)
Cash and cash equivalents at beginning of period	33,324,924	12,189,081
Cash and cash equivalents at end of period	\$ 30,136,979	\$ 11,173,062
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid during the period for interest	\$ 90,282	\$ 34
SUPPLEMENTAL SCHEDULE OF NON-CASH FINANCING AND INVESTING ACTIVITIES:		
Common shares issued in connection with the purchase of assets	\$ 2,300,000	\$ -
Common shares issued as part of merger	\$ 2,600,000	\$ -
Warrants issued as part of merger	\$ 954,879	\$ -

See accompanying notes to the condensed consolidated interim financial statements.

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

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

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

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

BioTime's operating revenues have been derived almost exclusively from royalties and licensing fees related to the sale of its plasma volume expander product, Hextend®. BioTime began to make its first stem cell research products available during 2008, but has not yet generated significant revenues from the sale of those products. BioTime's ability to generate substantial operating revenue depends upon its success in developing and marketing or licensing its plasma volume expanders and stem cell products and technology for medical and research use. On April 29, 2009, the California Institute of Regenerative Medicine ("CIRM") awarded BioTime a \$4,721,706 grant for a stem cell research project related to its ACTCellerate™ technology. The CIRM grant covers the period of September 1, 2009 through August 31, 2012 and is paid in quarterly installments. During the quarter ended March 31, 2011 BioTime received a quarterly payment of \$392,665. Grant revenues for the three months ended March 31, 2011 also includes \$18,315 and \$4,631 recognized through OrthoCyte and OncoCyte. During 2010, BioTime also received \$476,724 of a \$733,438 grant awarded under the U.S. Government's Qualifying Therapeutic Discovery Project ("QTDP"). BioTime received the remaining QTDP award in the amount of \$256,714 during the quarter ended March 31, 2011. The entire award from QTDP was recognized as revenues in 2010.

The unaudited condensed consolidated interim balance sheet as of March 31, 2011, the unaudited condensed consolidated interim statements of operations and comprehensive loss for the three months ended March 31, 2011 and 2010, and the unaudited condensed consolidated interim statements of cash flows for the three months ended March 31, 2011 and 2010 have been prepared by BioTime's management in accordance with the instructions from the Form 10-Q and Regulation S-X. In the opinion of management, all adjustments (consisting only of normal recurring adjustments) necessary to present fairly the financial position, results of operations, and cash flows at March 31, 2011 have been made. The condensed consolidated balance sheet as of December 31, 2010 is derived from the Company's annual audited financial statements as of that date. The results of operations for the three months ended March 31, 2011 are not necessarily indicative of the operating results anticipated for the full year of 2011.

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, 2010, which was derived from audited financial statements. Certain previously furnished amounts have been reclassified to conform with presentations made during the current periods. It is suggested that these condensed consolidated interim financial statements be read in conjunction with the annual audited condensed consolidated financial statements and notes thereto included in BioTime’s Form 10-K for the year ended December 31, 2010.

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

Subsidiary	BioTime Ownership	Country
ReCyte Therapeutics, Inc. (formerly Embryome Sciences, Inc.)	95.15%	USA
OncoCyte Corporation	74%	USA
OrthoCyte Corporation	100%	USA
ES Cell International Pte., Ltd.	100%	Singapore
BioTime Asia, Limited	81%	Hong Kong
Cell Cure Neurosciences, Ltd.	53.6%	Israel
LifeMap Sciences, Inc.	100%	USA

All material intercompany accounts and transactions have been eliminated in consolidation. As of March 31, 2011 and as of December 31, 2010, we consolidated OncoCyte, ReCyte Therapeutics, ESI, Cell Cure Neurosciences, and BioTime Asia as we have the ability to control their operating and financial decisions and policies through our ownership, and we reflect the noncontrolling interest as a separate element of equity on our condensed consolidated balance sheet. LifeMap Sciences was organized during March 2011 and we have consolidated that subsidiary as well as of March 31, 2011.

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 pharmaceutical products; the ability to obtain United States Food and Drug Administration and foreign regulatory approval to market its pharmaceutical products; the 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 products; the 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 products; and the availability of reimbursement for the cost of pharmaceutical products (and related treatment) from government health administration authorities, private health coverage insurers, and other organizations.

Use of estimates – The preparation of condensed 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 condensed consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Revenue recognition – BioTime complies with SEC Staff Accounting Bulletin guidance on revenue recognition. Royalty and license fee revenues consist of product royalty payments and fees under license agreements and are recognized when earned and reasonably estimable. BioTime recognizes revenue in the quarter in which the royalty reports are received, rather than the quarter in which the sales took place. When BioTime is entitled to receive up-front nonrefundable licensing or similar fees pursuant to agreements under which BioTime has no continuing performance obligations, the fees are recognized as revenues when collection is reasonably assured. When BioTime receives up-front nonrefundable licensing or similar fees pursuant to agreements under which BioTime does have continuing performance obligations, the fees are deferred and amortized ratably over the performance period. If the performance period cannot be reasonably estimated, BioTime amortizes nonrefundable fees over the life of the contract until such time that the performance period can be more reasonably estimated. Milestone payments, if any, related to scientific or technical achievements are recognized in income when the milestone is accomplished if (a) substantive effort was required to achieve the milestone, (b) the amount of the milestone payment appears reasonably commensurate with the effort expended, and (c) collection of the payment is reasonably assured. Grant income is recognized as revenue when earned.

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 condensed consolidated balance sheet. Total trade receivables amounted to \$244,002 and \$125,000 and grants receivable amounted to nil and \$543,000 as of March 31, 2011 and December 31, 2010. These amounts are deemed fully collectible; as such BioTime did not recognize any allowance for doubtful accounts as of March 31, 2011 and December 31, 2010. BioTime evaluates the collectability of its receivables based on a variety of factors, including the length of time receivables are past due and significant one-time events and historical experience. An additional reserve for individual accounts will be recorded if BioTime becomes aware of a customer's inability to meet its financial obligations, such as in the case of bankruptcy filings or deterioration in the customer's operating results or financial position. If circumstances related to customers change, estimates of the recoverability of receivables would be further adjusted.

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

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

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.

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.

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.

Comprehensive Loss - In countries in which BioTime operates, and the functional currency is other than the U.S. dollar, assets and liabilities are translated using published exchange rates in effect at the condensed consolidated balance sheet date. Revenues and expenses and cash flows are translated using an approximate weighted average exchange rate for the period. Resulting translation adjustments are recorded as a component of accumulated other comprehensive income on the condensed consolidated balance sheet. As of March 31, 2011 and 2010, accumulated other comprehensive loss includes loss of \$557,765 and nil, respectively which is entirely from foreign currency translation.

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. Effective January 1, 2007, BioTime adopted the provisions of a FASB Interpretation on accounting for uncertainty in income taxes. The FASB guidance also prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not sustainable upon examination by taxing authorities. BioTime recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense. No amounts were accrued for the payment of interest and penalties as of March 31, 2011 and December 31, 2010. Management is currently unaware of any tax issues under review

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

Impairment of long-lived assets – BioTime's long-lived assets, including intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be fully recoverable. If an impairment indicator is present, BioTime evaluates 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 consulting services, and deferred license fees paid to acquire rights to use the proprietary technologies of third parties. The value of the warrants is being amortized over the period the services are being provided, and the license fees are being amortized over the estimated useful lives of the licensed technologies or licensed research products. See Note 6.

Loss per share – Basic net loss per share is computed by dividing net loss available to common shareholders 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 quarters ended March 31, 2011 and 2010 excludes any effect from 3,173,273 options and 649,513 warrants, and 3,542,000 options and 3,440,832 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 condensed consolidated balance sheets.

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

Effect of recently issued and recently adopted accounting pronouncements – In April 2010, the FASB issued an Accounting Standards Update (“ASU”) which provides guidance on defining a milestone and determining when it may be appropriate to apply the milestone method of revenue recognition for research or development transactions. Research or development arrangements frequently include payment provisions whereby a portion or all of the consideration is contingent upon milestone events such as successful completion of phases in a study or achieving a specific result from the research or development efforts. The amendments in this standard provide guidance on the criteria that should be met for determining whether the milestone method of revenue recognition is appropriate. This standard is effective for fiscal years and interim periods within those years beginning on or after June 15, 2010, with early adoption permitted. This standard became effective for BioTime on January 1, 2011. The adoption of these provisions did not have a material impact on BioTime’s condensed consolidated financial statements.

In December 2010, the FASB issued ASU 2010-29, *Business Combinations — Disclosure of Supplementary Pro Forma Information for Business Combinations*, (“ASU 2010-29”), that amends ASC Subtopic 805-50, *Business Combinations — Disclosures*, and requires public entities that are required to present comparative financial statements to disclose revenue and earnings of the combined entity as though the business combination that occurred during the current year had occurred as of the beginning of the comparable prior annual reporting period only. The amendment also requires public entities to include a description of the nature and amount of material, nonrecurring pro forma adjustments directly attributable to the business combination included in the reported pro forma revenue and earnings. BioTime adopted the provisions of ASU 2010-29. The adoption of these provisions did not have a material impact on BioTime's condensed consolidated financial statements.

2. Inventory

At March 31, 2011, ReCyte Therapeutics, in which BioTime owns approximately a 95% interest, held \$29,427 of inventory of finished products on-site at its corporate headquarters in Alameda, California. At that same date \$16,175 of inventory of finished products was held by a third party on consignment. At December 31, 2010, ReCyte Therapeutics held \$29,600 of inventory of finished products at its corporate headquarters and \$15,870 of inventory of finished products was held by a third party on consignment. The inventory held by ReCyte Therapeutics is being transferred to BioTime or another BioTime subsidiary in connection with the change in focus of the subsidiary’s business from the production and sale of products for the research market to the development of therapeutic products to treat vascular and blood disease and disorders. At March 31, 2011 and December 31, 2010, OrthoCyte Corporation, a wholly owned subsidiary held \$25,058 and nil, respectively of finished goods inventory at an offsite location.

3. Equipment

At March 31, 2011 and December 31, 2010, equipment, furniture and fixtures comprised of the following:

	March 31, 2011 (unaudited)	December 31, 2010
Equipment, furniture and fixtures	\$ 1,310,541	\$ 876,708
Accumulated depreciation	(281,587)	(165,942)
Equipment, net	<u>\$ 1,028,954</u>	<u>\$ 710,766</u>

Depreciation expense amounted to \$65,244 and \$10,240 for the three months period ended March 31, 2011 and 2010, respectively. The difference between the depreciation expense recognized in the condensed consolidated statement of operations and the increase in accumulated depreciation of \$115,645 per the condensed consolidated balance sheet is entirely attributed to foreign currency rates.

4. Intangible assets

At March 31, 2011 and December 31, 2010, intangible assets and accumulated intangible assets comprised of the following:

	March 31, 2011 (unaudited)	December 31, 2010
Intangible assets	\$ 23,154,265	\$ 16,208,116
Accumulated amortization	(1,303,976)	(821,211)
Intangible assets, net	<u>\$ 21,850,289</u>	<u>\$ 15,386,905</u>

BioTime amortizes its intangible assets over an estimated period of 10 years on a straight line basis. BioTime recognized \$456,152 in amortization expense of intangible assets during the quarter. The difference between the amortization expense recognized in the condensed consolidated statement of operations and the increase in accumulated amortization of \$482,765 per the condensed consolidated balance sheet is entirely attributed to foreign currency rates.

5. Accounts Payable and Accrued Liabilities

At March 31, 2011 and December 31, 2010, accounts payable and accrued liabilities consist of the following:

	March 31, 2011 (unaudited)	December 31, 2010
Accounts payable	\$ 1,164,562	\$ 1,036,145
Accrued bonuses	15,000	367,822
Other accrued liabilities	1,064,758	525,907
	<u>\$ 2,244,320</u>	<u>\$ 1,929,874</u>

6. Royalty Obligation and Deferred License Fees

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

BioTime did not amortize deferred license fees during the first three quarters of 2010 on the basis that sales of products under the licenses had not yet begun. Because BioTime has modified its procedure for amortizing deferred license fees during the fourth quarter of 2010, certain differences resulted in BioTime's research and development expenses, total expenses, and net loss for the three months ended March 31, 2011 as compared to the three months ended March 31, 2010. Had BioTime amortized deferred license fees during the three months ended March 31, 2010, the amount of amortization would have been \$26,479. BioTime does not believe that the difference was material to its results of operations for the prior period. Amortization of deferred license fees recognized during the quarter ended March 31, 2011 amounted to \$27,375.

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 Embryome Sciences 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. In March 2009, BioTime amended its license agreement with WARF. The amendment increased the license fee from the original \$225,000 to \$295,000, of which \$225,000 was paid in cash and \$70,000 was paid by delivering BioTime common shares having a market value of \$70,000 as of March 2, 2009. The amendment extended until March 2, 2010 the dates for payment of the \$215,000 balance of the cash license fee and \$20,000 in remaining reimbursement of costs associated with preparing, filing, and maintaining the licensed patents. The commencement date for payment of an annual \$25,000 license maintenance fee was also been extended to March 2, 2010. The licensing fees less the amortized portion were included in deferred license fees in BioTime's condensed consolidated balance sheet as of March 31, 2011 and December 31, 2010.

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

On July 10, 2008, ReCyte Therapeutics entered into a License Agreement with Advanced Cell Technology, Inc. (“ACT”), under which ReCyte Therapeutics acquired exclusive worldwide rights to use ACT’s “ACTCellerate” technology for methods to accelerate the isolation of novel cell strains from pluripotent stem cells. ReCyte Therapeutics paid ACT a \$250,000 license fee and will pay an 8% royalty on sales of products, services, and processes that utilize the licensed technology. Once a total of \$1,000,000 of royalties has been paid, no further royalties will be due. The license will expire in twenty years or upon the expiration of the last to expire of the licensed patents, whichever is later. The \$250,000 license fee less the amortized portion is included in deferred license fees in BioTime’s condensed consolidated balance sheet as of March 31, 2011 and December 31, 2010.

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

The technology licensed by ReCyte Therapeutics covers methods to transform cells of the human body, such as skin cells, into an embryonic state in which the cells will be pluripotent. Under the ACT License, ReCyte Therapeutics paid ACT a \$200,000 license fee and will pay a 5% royalty on sales of products, services, and processes that utilize the licensed ACT technology, and 20% of any fees or other payments (other than equity investments, research and development costs, loans and royalties) received by ReCyte Therapeutics from sublicensing the ACT technology to third parties. Once a total of \$600,000 of royalties has been paid, no further royalties will be due. The license will expire in twenty years or upon the expiration of the last-to-expire of the licensed patents, whichever is later. The \$200,000 license fee payment less the amortized portion is included in deferred license fees in BioTime’s condensed consolidated balance sheet as of March 31, 2011 and December 31, 2010.

Under the Kirin Sublicense, ReCyte Therapeutics has paid ACT a \$50,000 license fee and will pay a 3.5% royalty on sales of products, services, and processes that utilize the licensed ACT technology, and 20% of any fees or other payments (other than equity investments, research and development costs, loans and royalties) received by ReCyte Therapeutics from sublicensing the Kirin Technology to third parties. ReCyte Therapeutics will also pay to ACT or to an affiliate of Kirin Pharma Company, Limited (“Kirin”), annually, the amount, if any, by which royalties payable by ACT under its license agreement with Kirin are less than the \$50,000 annual minimum royalty due. Those payments by ReCyte Therapeutics will be credited against other royalties payable to ACT under the Kirin Sublicense. The license will expire upon the expiration of the last to expire of the licensed patents, or May 9, 2016 if no patents are issued. The \$50,000 license fee payment less the amortized portion is included in deferred license fees in BioTime’s condensed consolidated balance sheet as of March 31, 2011 and December 31, 2010.

In February 2009, ReCyte Therapeutics entered into a Stem Cell Agreement with Reproductive Genetics Institute (“RGI”). In partial consideration of the rights and licenses granted to ReCyte Therapeutics by RGI, BioTime issued to RGI 32,259 common shares, having a market value of \$50,000 on the effective date of the Stem Cell Agreement. This \$50,000 payment less the amortized portion is included in deferred license fees in BioTime’s condensed consolidated balance sheet as of March 31, 2011 and December 31, 2010.

Through BioTime’s acquisition of the assets of Cell Targeting, Inc. during March 2011, BioTime acquired a royalty-bearing, exclusive, worldwide license from the Sanford-Burnham Medical Research Institute (“SBMRI”) to use certain patents pertaining to homing peptides for preclinical research investigations of cell therapy treatments, and to enhance cell therapy products for the treatment and prevention of disease and injury in conjunction with BioTime’s own proprietary technology or that of a third party. BioTime will pay SBMRI a royalty of 4% on the sale of pharmaceutical products, and 10% on the sale of any research-use products that BioTime develops using or incorporating the licensed technology; and 20% of any payments BioTime receives for sublicensing the patents to third parties. The royalties payable to SBMRI may be reduced by 50% if royalties or other fees must be paid to third parties in connection with the sale of any products. An annual license maintenance fee is payable each year during the term of the license, and after commercial sales of royalty bearing products commence, the annual fee will be credited towards our royalty payment obligations for the applicable year. BioTime will reimburse SBMRI for 25% of the costs incurred in filing, prosecuting, and maintaining patent protection, subject to BioTime’s approval of the costs.

Cell Cure Neurosciences has entered into an Amended and Restated Research and License Agreement with Hadasit Medical Research Services and Development Ltd. under which Cell Cure Neurosciences received an exclusive license to use certain of Hadasit’s patented technologies for the development and commercialization for hES cell-derived cell replacement therapies for retinal degenerative diseases. Cell Cure Neurosciences paid Hadasit 249,058 New Israeli Shekels as a reimbursement for patent expenses incurred by Hadasit, and pays Hadasit quarterly fees for research and product development services under a related Product Development Agreement. If Teva exercises its option to commercialize OpRegen,™ it will pay Cell Cure Neurosciences an initial license fee, plus milestone payments as the clinical development and commercialization of the product progress, and royalties on sales of OpRegen.™ Royalty payments would range from 6% to 10% of the net sale price of OpRegen,™ depending upon the total amount of annual sales. The license fee and milestone payments would total \$29.5 million if clinical trials are successful and the product is sold in the United States and one or more European Union countries. The royalty payments will be reduced by 50% with respect to sales in any country in which a generic equivalent product is being sold by a third party unrelated to Teva. Payments of like amounts would be made to Cell Cure Neurosciences if OpRegen-Plus™ is successfully developed and marketed in the United States and one or more European Union countries

If Teva does not exercise its option and Cell Cure Neurosciences instead commercializes OpRegen™ or OpRegen-Plus™ itself or sublicenses the Hadasit patents to a third party for the completion of development or commercialization of OpRegen™ or OpRegen-Plus,™ Cell Cure Neurosciences will pay Hadasit a 5% royalty on sales of products that utilize the licensed technology. Cell Cure Neurosciences will also pay sublicensing fees ranging from 10% to 30% of any payments Cell Cure Neurosciences receives from sublicensing the Hadasit patents to companies other than Teva. Commencing in January 2017, Hadasit will be entitled to receive an annual minimum royalty payment of \$100,000 that will be credited toward the payment of royalties and sublicense fees otherwise payable to Hadasit during the calendar year.

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

Through its merger with Glycosan BioSystems, Inc. (discussed in Note 9) during March 2011, OrthoCyte acquired a license from the University of Utah to use certain patents in the production and sale of certain hydrogel products. Under the License Agreement, OrthoCyte will pay a 3% royalty on sales of products and services performed that utilize the licensed patents. Commencing in 2013, OrthoCyte will be obligated to pay minimum royalties to the extent that actual royalties on products sales and services utilizing the patents are less than the minimum royalty amount. The minimum royalty amounts are \$15,000 in 2013, \$22,500 in 2014, and \$30,000 each year thereafter during the term of the License Agreement. OrthoCyte shall also pay the University of Utah 30% of any sublicense fees or royalties received under any sublicense of the licensed patents.

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

7. Equity

Warrants

BioTime has issued warrants to purchase its common shares as payments for services and in connection certain business acquisitions. At March 31, 2011, 649,513 warrants to purchase common shares with a weighted average exercise price of \$9.00 and a weighted average remaining contractual life of 2.28 years were outstanding.

Preferred Shares

BioTime is authorized to issue 1,000,000 preferred shares of stock. The preferred shares may be issued in one or more series as the board of directors may by resolution determine. The board of directors is authorized to fix the number of shares of any series of preferred shares and to determine or alter the rights, references, privileges, and restrictions granted to or imposed on the preferred shares as a class, or upon any wholly unissued series of any preferred shares. The board of directors may, by resolution, increase or decrease (but not below the number of shares of such series then outstanding) the number of shares of any series of preferred shares subsequent to the issue of shares of that series.

As of March 31, 2011 BioTime had no issued and outstanding preferred shares.

Common Shares

BioTime is authorized to issue 75,000,000 common shares with no par value. As of March 31, 2011, BioTime had issued and outstanding 48,797,564 common shares.

During the three months ended March 31, 2011, BioTime received total cash of \$90,031 for the exercise of 218,910 options, and \$386,300 for the exercise of 206,100 warrants. Average cash receipts were \$0.41 for options and \$1.87 for warrants.

During the three months ended March 31, 2011 and 2010, BioTime recognized stock-based compensation expenses of \$433,336 and \$224,643, respectively, due to stock options granted to employees and directors. During the three months ended March 31, 2011, BioTime granted 71,593 options, under its 2002 Stock Option Plan. No options were granted in the same period in the prior year.

8. Cell Targeting, Inc. Asset Purchase

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

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

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

Components of the purchase price:

BioTime common shares	\$ 2,300,000
Cash	250,000
Total purchase price	<u>\$ 2,550,000</u>

Preliminary allocation of purchase price:

Assets acquired and Liabilities assumed:

Cash	\$ 253,150
Other current assets	2,443
Intangible assets	3,012,640
Current liabilities	(718,233)
Net assets acquired	<u>\$ 2,550,000</u>

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

9. Merger with Glycosan BioSystems, Inc.

On March 21, 2011, we completed the merger of Glycosan BioSystems, Inc. ("Glycosan") into our wholly-owned subsidiary OrthoCyte. Through the merger, OrthoCyte acquired all of Glycosan's assets, including manufacturing equipment, inventory, and technology licenses, and assumed Glycosan's obligations, which at March 18, 2011 totaled approximately \$252,000 and primarily consisted of trade payables, accrued salaries, legal fees, and repayment of amounts advanced to Glycosan. We issued 332,894 of our common shares and 206,613 warrants to purchase our common shares in connection with the merger.

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

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

Components of the purchase price:

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

Preliminary allocation of purchase price:

Assets acquired and Liabilities assumed:

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

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

10. Unaudited Pro Forma Interim Financial Information –Three Months Ended March 31, 2011 and 2010

The following unaudited pro forma information gives effect to the acquisition of Cell Targeting, Glycosan, ESI and Cell Cure as if the acquisition took place on January 1, 2010. The pro forma information does not necessarily reflect the results of operations that would have occurred had the entities been a single company during the periods presented.

	Three Months Ended	
	March 31, 2011 (Unaudited)	March 31, 2010 (Unaudited)
Revenues	\$ 1,067,546	\$ 836,745
Net loss available to common shareholders	\$ (3,989,567)	\$ (1,933,721)
Net loss per common share – basic and diluted	\$ (0.08)	\$ (0.05)

11. Subsequent Events

During March 2011, BioTime organized a new subsidiary, LifeMap Sciences, Inc., to advance the development and commercialization of BioTime's embryonic stem cell database. In April 2011, BioTime invested approximately \$833,000 in LifeMap Sciences and plans to invest approximately \$1,166,000 more by July 1, 2012 if certain database development milestones are attained and certain other conditions are met. LifeMap Sciences plans to make the database available for use by stem cell researchers at pharmaceutical and biotechnology companies and other institutions through paid subscriptions or on a fee per use basis.

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

Overview

We are a biotechnology company engaged in two areas of biomedical research and product development. Initially we developed blood plasma volume expanders and related technology for use in surgery, emergency trauma treatment, and other applications. Currently we are focused on regenerative medicine, an emerging field of therapeutic product development based on recent discoveries in stem cell research.

Our lead blood plasma expander product, Hextend[®], is a physiologically balanced intravenous solution used in the treatment of hypovolemia, a condition caused by low blood volume, often from blood loss during surgery or injury. Hextend maintains circulatory system fluid volume and blood pressure, and keeps vital organs perfused during surgery and trauma care. Hextend is manufactured and distributed in the United States by Hospira, Inc., and in South Korea by CJ CheilJedang Corp ("CJ"), under license from us.

"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. Historically speaking, this has never been possible in the past, and was made possible by the first isolation of human embryonic stem ("hES") cells and creation of induced pluripotent stem ("iPS") cells. These cells are called "pluripotent stem cells" because they have the unique property of being able to branch out into each and every kind of cell in the human body such as 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 simply regenerating the affected cells and tissues, and therefore may have broader applicability.

Our efforts in regenerative medicine include the development and sale of products designed for research applications as well as for therapeutic uses. We offer advanced human stem cell products and technology that can be used by researchers at universities, at companies in the bioscience and biopharmaceutical industries, and at other companies that provide research products to companies in those industries. Research products generally can be marketed without regulatory approval, and are therefore relatively near-term business opportunities, especially when compared to therapeutic products.

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

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

Subsidiary	Field of Business	BioTime Ownership	Country
ReCyte Therapeutics, Inc.	Blood and vascular diseases including coronary artery disease	95.15%	USA
	iPS cell banking		
OncoCyte Corporation	Cancer	74%	USA
OrthoCyte Corporation	Orthopedic diseases, including osteoarthritis	100%	USA
	Biocompatible hydrogels that mimic the human extracellular matrix		
ES Cell International Pte. Ltd.	Stem cell products for research, including cell lines produced under clinical "good manufacturing practices" ("GMP")	100%	Singapore
BioTime Asia, Limited	Ophthalmologic, skin, musculo-skeletal system, and hematologic diseases.	81%	Hong Kong
	Stem cell products for research		
Cell Cure Neurosciences, Ltd.	Age-related macular degeneration	53.6%	Israel
	Multiple sclerosis		
	Parkinson's disease		
LifeMap Sciences, Inc	Stem cell data base	100%	USA

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

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.

Recent Developments

During the first quarter of 2011, we made two important acquisitions. In January 2011, we acquired the assets of Cell Targeting, Inc. (“CTI”), a biotechnology company focused on technologies to “paint” molecules on the surface of cells that cause the cells to adhere to particular tissues, such as those afflicted with disease. CTI and its collaborators have produced several such tissue-specific and disease-specific cell modification agents with the potential to raise cell therapy products to a new level of performance. We will initially provide this technology to our majority-owned subsidiary OncoCyte Corporation for use in the development of genetically modified hES-derived vascular progenitors designed to target and destroy malignant tumors.

During March 2011, we acquired Glycosan BioSystems, Inc. through a merger between Glycosan and our subsidiary OrthoCyte Corporation. Glycosan has been a leader in developing, manufacturing, and marketing proprietary biocompatible hydrogels that mimic the extracellular matrix in which cells reside. We intend to initially use the Glycosan technology in the development of therapeutic products for use in the treatment of osteoarthritis. Glycosan’s hydrogels may have other applications when combined with the diverse and scalable cell types our scientists have isolated from hES cells. Glycosan has recently developed HyStem-Rx for potential use as an implantable cell delivery matrix. In addition, we may elect to seek regulatory approval for the use of one Glycosan hydrogel, HyStem-Rx, as a stand-alone cell delivery device in countries outside of the United States.

HyStem®-Rx is a biocompatible hydrogel that mimics the extracellular matrix in which cells reside. As an injectable product, HyStem®-Rx may address an immediate need in cosmetic and reconstructive surgery and other procedures by improving the process of transplanting adipose (fat) cells or other adult stem cells. Adult stem cell types such as adipose stem cells obtained from a patient through liposuction can be transplanted back into the same patient in another location in the body, without the risk of rejection associated with the transplant of donor tissues. However, the transplantation of cells without the molecular matrix in which cells normally reside often leads to widespread cell death or the failure of the transplanted cells to remain in the transplant site. The transplant of cells in HyStem®-Rx may resolve these hurdles by localizing the transplanted cells in the intended location, and providing a three-dimensional form for the cells to rebuild normal tissue. HyStem®-Rx may have use in other emerging cell and tissue transplant therapies to treat osteoarthritis, brain tumors, stroke, bone fractures, and wounds. The use of HyStem-Rx as an implantable cell delivery matrix in humans will require approval by the United States FDA and comparable regulatory agencies in foreign countries, which has not yet been obtained. We expect to invest approximately \$1.2 million during the next 12 to 14 months on more advanced pre-clinical development of HyStem-Rx, including additional biocompatibility, safety and toxicity testing, and performing manufacturing and assay validations, with the plan to subsequently design and conduct clinical trials and apply for regulatory approval to market HyStem-Rx as an implantable cell delivery device in countries outside the United States during the following two year period. BioTime believes that it may be possible to obtain regulatory approval within the European Union and all other countries that accept the CE Mark with an expenditure of between \$3 million and \$5 million, depending on clinical trial requirements and results.

During March 2011, we organized a new subsidiary, LifeMap Sciences, Inc., to advance the development and commercialization of our embryonic stem cell database. The new expanded data will address all known human branches in the mammalian developmental tree, including several thousand stem and progenitor cells, and related information such as anatomy, differentially-expressed gene signatures, and research reagents. Our plan is to make the database available for use by stem cell researchers at pharmaceutical and biotechnology companies and other institutions through paid subscriptions or on a fee per use basis. The database will permit users to follow the development of embryonic stem cell lines to the purified progenitor cell lines created by us using our proprietary ACTCellerate™ technology.

Plasma Volume Expander Products

Our operating revenues have been derived almost exclusively from royalties and licensing fees related to our plasma volume expander products, primarily Hextend. Hextend has become the standard plasma volume expander at a number of prominent teaching hospitals and leading medical centers and is part of the Tactical Combat Casualty Care protocol. We believe that as the decision to use Hextend proliferates within leading U.S. hospitals, other smaller hospitals will follow this trend, contributing to sales growth.

Under our license agreements, Hospira and CJ will report sales of Hextend and pay us the royalties and license fees due on account of such sales after the end of each calendar quarter. We recognize such revenues in the quarter in which the sales report is received, rather than the quarter in which the sales took place. Accordingly, our royalty revenues for the three months ended March 31, 2011 consist of royalties on sales of Hextend made by Hospira and CJ during the period beginning October 1, 2010 and ending December 31, 2010.

Stem Cell Products for Research in Regenerative Medicine

We are marketing our stem cell products for research through our website *Embryome.com*. By an agreement with us, Millipore Corporation became a worldwide distributor of certain ACTCellerate™ human embryonic progenitor cell (“hEPC”) lines and related ESpan™ growth media. We made our initial delivery of six hEPC lines to Millipore during January 2010, and these lines are being marketed and distributed on a worldwide basis. The companies anticipate jointly launching an additional 29 cell lines and associated optimized ESpan™ growth media for the *in vitro* propagation of each progenitor cell line within the coming 12 months. The ACTCellerate™ hEPC lines and ESpan™ growth media products distributed by Millipore may also be purchased directly from us on our website *Embryome.com*. In addition to the products that we are co-marketing with Millipore, we now offer 92 other ACTCellerate™ hEPC lines for sale on *Embryome.com*, and we anticipate adding additional cell lines and related ESpan™ growth media and differentiation kits over time. We are also offering ACTCellerate™ hEPCs and ESpan™ growth media in Asia through BioTime Asia’s distribution agreement with Shanghai Genext Medical Technology Co., Ltd.

During November and December 2010, we signed agreements with the California Institute for Regenerative Medicine (“CIRM”) and the University of California system to distribute five human embryonic stem cell lines produced under the standard of Good Manufacturing Practices (“GMP”). The agreement provides for the lines to be distributed in two phases. In the first phase, BioTime is providing research grade versions of the lines under a material transfer agreement that restricts the use to research use only. We provided research-grade cell lines free of charge to CIRM-funded and California-based researchers until April 30, 2011. Since that date, researchers may purchase the research-grade cells from us at a price of \$2,600 per ampoule. As of April 30, 2011 we had provided research-grade lines to 28 researchers under this program, including researchers at Stanford University, the University of California San Francisco, the University of Southern California, the University of California Davis, the University of California Los Angeles, the University of California San Diego, California State University Fullerton as well as other institutions.

In the second phase, we plan to make the GMP-grade cell lines, along with certain documentation and complete genomic DNA sequence information, available by November 2011. We will charge a price for the GMP-grade cell lines that covers our production and delivery costs. Although no royalties will be payable to us by researchers who acquire the cell lines for research use, researchers who desire to use the GMP cell lines for therapeutic or diagnostic products, or for any other commercial purposes, may do so only after signing commercialization agreements acceptable to us. Commercialization agreements under this program will entitle us to receive royalties on net sales not to exceed 2% of net sales, reducible to 1.5% if the researcher must pay any other royalties in connection with the commercialization of their product.

We are still in the process of launching our first products for stem cell research and cannot yet predict the amount of revenue that may be generated by these new products.

Research and Development Programs in Regenerative Medicine and Stem Cell Research

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

Company	Program	Status
BioTime ⁽¹⁾ and ES Cell International Pte. Ltd. (“ESI”)	ACTCellerate™ cell lines/ growth media/reagent kits for stem cell research GMP hES cell lines	Nearly 300 products for stem cell research are now being offered, including ACTCellerate™ hEPCs, ESpan™ cell line optimal growth media, and reagent cell differentiation kits. We plan to add additional cell lines, growth media, and differentiation kits with characterization of new hEPCs ESI has developed and offers for sale GMP hES cell lines for research purposes.
BioTime ⁽¹⁾	CIRM-funded research project addressing the need for industrial-scale production of purified therapeutic cells	Conducted long-term stability studies of hEPCs using commercial-type culture processes to demonstrate phenotypic stability and genotypic stability during culture expansion. Attempting to define a molecular signature of cell surface markers that would be unique to a given hEPC cell line to permit development of reagents to those markers that can be used to purify the target hEPCs intended for therapy. Mapping cell surface protein expression directly on hEPCs using large collections of commercially available antibodies and have begun testing those antibodies as affinity reagents for purifying target hEPCs. Identifying peptide reagents that show specificity for cell surface targets on hEPCs and could thus be used directly as affinity reagents.



Company	Program	Status
OncoCyte	Vascular endothelial cells that can be engineered to deliver a toxic payload to the developing blood vessels of a tumor	<p>Developed a derivation protocol that can reproducibly produce populations of endothelial-type cells with levels of purity and efficiency far above those reported in the published literature.</p> <p>Established broad range of support assays to monitor and measure vascular endothelial cell differentiation process.</p> <p>Initiated <i>in vivo</i> experiments monitoring incorporation of endothelial cells into developing mouse vasculature and into the developing vasculature of human tumor xenografts.</p> <p>Completed initial development of a toxic payload transgene system which includes a pro-drug converting enzyme (TK) and paired pro-drug (gangcyclovir)</p>
OrthoCyte	<p>Cartilage repair using embryonic progenitor cells</p> <p>Biocompatible hydrogels that mimic the human extra cellular matrix</p>	<p>Identified several cell lines that displayed molecular markers consistent with the production of human cartilage.</p> <p>Confirmed chondrogenic potential by directly measuring cartilage production from those lines.</p> <p>Demonstrated that those cell lines can be combined with commonly used support matrices to formulate a combination product for treating cartilage deficits.</p> <p>Developed Extracel PEGgel and HyStem hydrogel products for basic laboratory research use</p> <p>Conducted pre-clinical development of HyStem Rx as an implantable cell delivery device</p>
ReCyte Therapeutics	Therapeutic products for cardiovascular and blood diseases utilizing its proprietary ReCyte™ iPS technology.	Evaluating effects of telomere length on growth potential of iPS cells and iPS-derived progenitor lines.
BioTime	Hextend – Blood plasma volume expanders	Hextend is currently marketed to hospitals and physicians in the USA and Korea. Activities include complying with all regulatory requirements and promotional activities.
BioTime Asia	Distributing ACTCellerate hEPC lines growth media and reagents	Initial sales of cell lines, growth media, and differentiation kits, to customers in Asia.
Cell Cure Neurosciences	OpRegen™ and OpRegen-Plus™ for treatment of age related macular degeneration	<p>Conducted animal model studies to establish proof of concept.</p> <p>Developed directed differentiation as efficient method for short culture period to produce a supply of retinal pigment epithelial cells.</p> <p>Granted Teva Pharmaceutical Industries, Ltd. an option to complete clinical development of, and to manufacture, distribute, and sell, OpRegen™ and OpRegen-Plus™</p>

(1) During late December 2010, our subsidiary, Embryome Sciences, Inc., changed its name to ReCyte Therapeutics, Inc. in conjunction with a change of its business focus to the research and development of therapeutic products to treat blood and vascular diseases and disorders. Embryome Sciences' research products business and ACTCellerate™ hEPC research and development projects, including related patent and technology rights, are being assigned to BioTime or other BioTime subsidiaries.

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

We believe each of our subsidiaries has sufficient capital to carry out its current research and development plan during 2011. We may provide additional financing for our subsidiaries, or obtain financing from third parties, based on the following: our evaluation of progress made in their respective research and development programs, any changes to or the expansion of the scope and focus of their research, and our projection of future costs. See “Liquidity and Capital Resources” for a discussion of our available capital resources, our potential need for future financing, and possible sources of capital.

Critical Accounting Policies

Revenue recognition – We comply with SEC Staff Accounting Bulletin guidance on revenue recognition. Royalty and license fee revenues consist of product royalty payments and fees under license agreements and are recognized when earned and reasonably estimable. We recognize revenue in the quarter in which the royalty reports are received rather than the quarter in which the sales took place. When we are entitled to receive up-front nonrefundable licensing or similar fees pursuant to agreements under which we have no continuing performance obligations, the fees are recognized as revenues when collection is reasonably assured. When we receive up-front nonrefundable licensing or similar fees pursuant to agreements under which we do have continuing performance obligations, the fees are deferred and amortized ratably over the performance period. If the performance period cannot be reasonably estimated, we amortize nonrefundable fees over the life of the contract until such time that the performance period can be more reasonably estimated. Milestone payments, if any, related to scientific or technical achievements are recognized in income when the milestone is accomplished if (a) substantive effort was required to achieve the milestone, (b) the amount of the milestone payment appears reasonably commensurate with the effort expended, and (c) collection of the payment is reasonably assured. Grant income is recognized as revenue when earned.

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

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

Stock-based compensation – We have adopted accounting standards governing share-based payments, which require the measurement and recognition of compensation expense for all share-based payment awards made to directors and employees, including employee stock options, based on estimated fair values. We utilize the Black-Scholes Merton option pricing model. Our determination of fair value of share-based payment awards on the date of grant using an option-pricing model is affected by our stock price as well as assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to, expected stock price volatility over the term of the awards, and the 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 United States 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.

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

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

Principles of consolidation – Our condensed consolidated financial statements include the accounts of our wholly-owned subsidiaries, OrthoCyte, LifeMap Sciences, and ESI, the accounts of ReCyte Therapeutics, a subsidiary of which we owned approximately 95% of the outstanding shares of common stock as of March 31, 2011; the accounts of OncoCyte, a subsidiary of which we owned approximately 74% of the outstanding shares of common stock as of March 31, 2011; the accounts of BioTime Asia, a subsidiary of which we owned approximately 81% of the outstanding shares as of March 31, 2011, and the accounts of Cell Cure Neurosciences, a subsidiary in which we owned approximately 53.6% of the outstanding shares as of March 31, 2011. All material intercompany accounts and transactions have been eliminated in consolidation. The condensed consolidated financial statements are presented in accordance with accounting principles generally accepted in the United States and with the accounting and reporting requirements of Regulation S-X of the SEC.

Results of Operations

Revenues

Under our license agreements with Hospira and CJ, our licensees report sales of Hextend and pay us the royalties 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. Our royalty revenues for the three months ended March 31, 2011 consist of royalties on sales of Hextend made by Hospira and CJ during the period beginning October 1, 2010 and ending December 31, 2010. Royalty revenues recognized for the first quarter of 2011 were \$187,621 from Hospira and \$28,350 from CJ during. Total royalties of \$215,971 for the quarter decreased 27% from royalties of \$297,000 received during the same period last year.

Based on sales of Hextend that occurred during the first quarter of 2011, we expect to receive royalties of \$144,155 from Hospira and we have received \$28,365 from CJ during the second quarter of 2011. Total royalties of \$172,520 for the quarter decreased 19.9% from royalties of \$215,308 received during the same period last year. These royalties will be reflected in our financial statements for the second quarter of 2011.

The decrease in royalties received from Hospira is generally due to a decrease in sales to hospitals which was largely attributable to a drop in the price of competitive products in the market.

We recognized as revenue \$65,661 and \$73,226 of license fees from CJ and Summit Pharmaceuticals International Corporation during the three months ended March 31, 2011 and 2010, respectively. The license fees were received from CJ during April 2003 and July 2004, and from Summit during December 2004 and April and October of 2005, but full recognition of the license fees has been deferred, and is being recognized over the life of the contracts, which has been estimated to last until approximately 2019 based on the current expected life of the governing patent covering our products in Korea and Japan. See Note 1 to the Condensed Consolidated Interim Financial Statements. License fees for the three months ended March 31, 2011 also includes \$38,938 earned through ESI.

We recognized revenue of \$392,665 from our research grant from CIRM during the three months ended March 31, 2011, compared to \$395,096 during the same period last year. Grant revenues for the three months ended March 31, 2011 also includes \$18,315 and \$4,631 recognized through OrthoCyte and OncoCyte.

Operating Expenses

Research and development expenses increased to \$2,855,669 for the three months ended March 31, 2011, from \$1,159,951 for the three months ended March 31, 2010. For 2011, research and development expenses also included \$1,105,064 of research and development expense incurred by ESI and Cell Cure Neurosciences, of which \$405,648 is derived from the amortization of patent technology related to our acquisition of those subsidiaries in May and October 2010, respectively. Also, during the fourth quarter of the 2010 fiscal year, BioTime modified its procedure for amortizing deferred license fees. As a result, research and development expenses for the quarter ended March 31, 2011 include \$27,375, of amortization of deferred license fees. Had we amortized deferred license fees during the three months ended March 31, 2010, the amount would have been \$ 26,479. Aside from those expenses, the increase in research and development expense during 2011 is primarily attributable to an increase of \$151,017 in employee compensation and related costs allocated to research and development expense, an increase of \$46,057 in scientific consulting fees, an increase of \$57,503 in stock-based compensation allocated to research and development expense, an increase of \$32,352 of travel and related costs allocated to research and development expenses, an increase of \$32,857 in rent allocated to research and development expenses, an increase of \$104,016 in outside research and laboratory costs, and an increase of \$85,247 in expenditures made to cover laboratory expenses and supplies. Research and development expenses include laboratory study expenses, patent and technology license fees, employee compensation, rent, insurance, and science-related consultants' fees.

The following table shows the amount and approximate percentages of our total research and development expenses allocated to our primary research and development projects during the three months ended March 31, 2011. We do not have comparative data for the first quarter of 2010 on a program by program basis because many of the programs were in the early start-up phase, had not yet commenced, or the we had not yet acquired the subsidiary conducting the program.

Company	Program	Amount	Percent
BioTime and ESI	ACTCellerate hEPCs, GMP hES cell lines, and related research products	\$ 725,760	25%
BioTime	CIRM sponsored ACTCellerate technology	\$ 474,756	17%
OncoCyte	Cancer therapy	\$ 406,359	14%
OrthoCyte	Orthopedic therapy; hydrogel products	\$ 220,460	8%
ReCyte Therapeutics	IPS and vascular therapy	\$ 170,455	6%
BioTime	Hextend	\$ 100,666	3%
BioTime Asia	Stem cell products for research	\$ 76,355	3%
Cell Cure Neurosciences	OpRegen, TM OpRegen-Plus, TM and neurological disease therapies	\$ 680,858	24%

General and administrative expenses increased to \$1,994,847 for the quarter ended March 31, 2011 from \$933,298 for the three months ended March 31, 2010. For 2011, general and administrative expenses also included \$115,996 of general and administrative expense incurred by ESI and Cell Cure Neurosciences, which we acquired in May and October of 2010, respectively. The increase is further attributable to an increase of \$515,677 in employee compensation, bonuses and related costs allocated to general and administrative expense, an increase of \$78,684 in cash and stock-based compensation paid to our independent directors, an increase of \$179,345 general consulting fees arising from amortization of consulting fees attributable to the value of warrants issued to the minority shareholder in BioTime Asia for consulting services, an increase of \$12,108 in legal fees and general and administrative patent expenses, and an increase of \$75,043 in outside services. General and administrative expenses include employee and director compensation allocated to general and administrative expenses, consulting fees other than those paid for science-related consulting, expenditures for patent costs, trademark expenses, insurance costs allocated to general and administrative expenses, stock exchange-related costs, depreciation expense, shipping expenses, marketing costs, and other miscellaneous expenses.

Interest and Other Income (Expense)

For the three months ended March 31, 2011, we earned \$13,286 of interest income net of \$96,280 of interest expense, compared to interest income of \$13,195 net of \$57 of interest expense for the three months ended March 31, 2010. The increase in interest expense is primarily due to \$96,185 of interest expense offset by \$3,071 of interest income incurred by Cell Cure Neurosciences which we acquired in October 2010.

Income Taxes

During the three months ended March 31, 2011 and 2010, we had no Federal and state income tax obligations because we have substantial net operating loss carryovers and have provided a 100% valuation allowance for any deferred taxes.

Liquidity and Capital Resources

At March 31, 2011, we had \$30,136,979 of cash and cash equivalents on hand. We will depend upon revenue from the sale of our research products, royalties from the sale of Hextend by Hospira and CJ, and research grants from CIRM and other providers as our principal sources of revenues for the near future. Millipore and Genext began marketing some of our hEPC lines an ESpan™ growth media during 2010, but it is too early to predict future revenues from the sale of our stem cell research products by them.

Because our revenues from product sales and royalties are not presently sufficient to cover our operating expenses, we may need to obtain additional debt or equity capital in order to finance our operations. The future availability and terms of equity or debt financing are uncertain. We presently have issued and outstanding 649,513 common share purchase warrants, of which 556,613 are exercisable at a price of \$10.00 per share, and 92,900 at \$3.00 per share. These warrants expire on various dates ranging from September 2012 to May 2014. None of the warrants are publicly traded.

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

Cash generated by operations

During the three months ended March 31, 2011, we received \$873,282 of cash in our operations. Our sources of that cash were \$187,621 of royalty revenues from Hospira, \$28,365 of royalty revenues from CJ, a \$256,714 payment from a QTDP research grant, a \$392,665 research grant payment from CIRM, and a \$7,917 payment from the sale of research products.

Cash used in operations

During the three months ended March 31, 2011, our total research and development expenditures were \$2,855,669, and our general and administrative expenditures were \$1,994,847. Net loss attributable to BioTime for the three months ended March 31, 2011, amounted to \$3,362,132. Net cash used in operating activities during the quarter amounted to \$3,607,439. The difference between the net loss and net cash used in operating activities during the quarter was primarily attributable to non-cash expenses and accrued revenues, including \$289,540 in stock-based compensation paid to employees and consultants, amortization of \$456,152 in intangible assets, \$143,796 in options issued as independent director compensation, \$194,062 amortization of deferred consulting fees, \$27,375 amortization of deferred license fees, \$29,745 amortization of deferred rent, \$65,244 in depreciation expense, and \$261,777 in grants receivable. This overall difference was offset to some extent by amortization of \$65,661 in deferred license revenues, \$313,823 in prepaid expenses and other current assets, \$617,200 in accounts payable and accrued liabilities, \$118,782 in accounts receivable and net loss of \$582,553 allocable to the noncontrolling interest in our subsidiaries.

Cash flows from investing activities

During the three months ended March 31, 2011, \$287,983 was used for investing activities. The primary components of cash expended were approximately \$295,785 used in the purchase of equipment and \$250,000 used in the acquisition of Cell Targeting. This cash expenditure was offset to some extent by \$259,058 of cash acquired in connection with the asset purchase transaction with Cell Targeting and merger with Glycosan.

Cash generated by financing activities

During the three months ended March 31, 2011, \$689,831 in net cash was provided from our financing activities. During this period, we received \$90,031 in connection with the exercises of 218,910 stock options and \$386,300 in connection with the exercises of 206,100 stock purchase warrants, and \$213,500 from issuance of ReCyte common shares.

Contractual obligations

We had no contractual obligations as of March 31, 2011, with the exception of a fixed, non-cancelable operating lease on our office and laboratory facility in Alameda, California that expires on February 29, 2016. Base monthly rent under our current Alameda facility lease is \$27,972 per month, increasing by three percent each subsequent year of the new lease term. In addition to the base rent, we pay a pro rata share of real property taxes and certain costs associated to the operation and maintenance of the building in which the leased premises are located.

ESI's Singapore lease of office space expires on January 11, 2012. Base monthly rent under that lease is S\$2,286 (Singapore dollars). ESI's Singapore lease of lab space expires on October 31, 2011. Base monthly rent under the Singapore laboratory lease is S\$8,400 (Singapore dollars).

Future capital needs

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

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Foreign Currency Exchange Risk

We are exposed to some foreign exchange currency risks because we have subsidiaries that are located in foreign countries. We do not engage in foreign currency hedging activities. Because we translate foreign currencies into United States dollars for reporting purposes, currency fluctuations have an impact on our financial results. We believe that our exposure to currency exchange fluctuation risk is mitigated by the fact that our foreign subsidiaries pay their financial obligations almost exclusively in their local currency. As of March 31, 2011, currency exchange rates did not have a material impact on our intercompany transactions with our foreign subsidiaries. However, a weakening of the dollar against the foreign exchange used in the home countries of our foreign subsidiaries could increase our cost of providing additional financing to our foreign subsidiaries in the future. Conversely, a strengthening of the dollar would decrease our cost of making additional investments in those subsidiaries.

Credit Risk

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

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

Interest Rate Risk

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

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

It is management's responsibility to establish and maintain adequate internal control over all financial reporting pursuant to Rule 13a-15 under the Securities Exchange Act of 1934 (the "Exchange Act"). Our management, including our principal executive officer, our principal operations officer, and our principal financial officer, have reviewed and evaluated the effectiveness of our disclosure controls and procedures as of a date within ninety (90) days of the filing date of this Quarterly Report on Form 10-Q. Following this review and evaluation, management collectively determined that our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act (i) is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and (ii) is accumulated and communicated to management, including our chief executive officer, our chief operations officer, and our chief financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Controls

There were no changes in our internal control over financial reporting that occurred during the period covered by this Quarterly Report on Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings.

None.

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 net losses for the three months ended March 31, 2011 and for the fiscal years ended December 31, 2010, 2009 and 2008 were \$4,032,137, \$10,287,280, \$5,144,499, and \$3,780,895, respectively, and we had an accumulated deficit of \$67,316,641 as of March 31, 2011, and \$63,954,509, \$52,769,891, and \$47,625,392 as of December 31, 2010, 2009, and 2008, 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. Also, we have been awarded research grants from CIRM and QTDP. 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 \$2,855,669 during the three months ended March 31, 2011, and \$7,892,024, \$2,968,987, and \$1,725,187 during the fiscal years ended December 31, 2010, 2009 and 2008, 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 will be very expensive and will take years to complete. We may not have the financial resources to fund clinical trials on our own and we may have to enter into licensing or collaborative arrangements with larger, well-capitalized pharmaceutical companies in order to bear the cost. Any such arrangements may be dilutive to our ownership or economic interest in the products we develop, and we might have to accept a royalty payment on the sale of the product rather than receiving the gross revenues from product sales.

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

- The success of our business of selling products for use in stem cell research depends on the growth of stem cell research, without which there may be no market or only a very small market for our products and technology. The likelihood that stem cell research will grow depends upon the successful development of stem cell products that can be used to treat disease or injuries in people or that can be used to facilitate the development of other pharmaceutical products. The growth in stem cell research also depends upon the availability of funding through private investment and government research grants.
- There can be no assurance that any safe and efficacious human medical applications will be developed using stem cells or related technology.
- Government-imposed restrictions and religious, moral, and ethical concerns with respect to use of embryos or human embryonic stem cells in research and development could have a material adverse effect on the growth of the stem cell industry, even if research proves that useful medical products can be developed using human embryonic stem cells.

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

We recently formed a new subsidiary, LifeMap Sciences, to advance the development and commercialization of our embryonic stem cell database. We have invested approximately \$833,000 in LifeMap Sciences and we plan to invest approximately \$1,166,000 more by July 1, 2012 if certain database development milestones are attained and certain other conditions are met. Our plan is to make the database available for use by stem cell researchers at pharmaceutical and biotechnology companies and other institutions through paid subscriptions or on a fee per use basis, but there is no assurance that the data base will be successfully completed or that LifeMap Sciences will be able to generate sufficient paid subscriptions for use of the data base to allow us to recover our investment or earn a profit.

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

- Hextend is presently the only plasma expander product that we have on the market, and it is being sold only in the United States and South Korea. The royalty revenues that we have received from sales of Hextend have not been sufficient to pay our operating expenses. This means that we need to successfully develop and market or license additional products and earn additional revenues in sufficient amounts to meet our operating expenses.
- We will receive additional license fees and royalties if our licensees are successful in marketing Hextend and PentaLyte in Japan, Taiwan, and China, but they have not yet obtained the regulatory approvals required to begin selling those products.
- We are also beginning to bring our first stem cell research products to the market, but there is no assurance that we will succeed in generating significant revenues from the sale of those products.

Sales of our plasma volume expander products may be adversely impacted by the availability of competing products

- Hextend and our other plasma expander products will compete with other products that are commonly used in surgery and trauma care and sell at lower 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 Hesperan, an artificial plasma volume expander, and Hospira and Baxter International, Inc. manufacture and sell a generic equivalent of Hesperan.

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

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

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

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

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

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

- At March 31, 2011, we had \$30,136,979 of cash and cash equivalents on hand. There can be no assurance that we or our subsidiaries will be able to raise additional funds on favorable terms or at all, or that any funds raised will be sufficient to permit us or our subsidiaries to develop and market our products and technology. Unless we and our subsidiaries are able to generate sufficient revenue or raise additional funds when needed, it is likely that we will be unable to continue our planned activities, even if we make progress in our research and development projects.

- We 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. The loss of Dr. West's services could have a material adverse effect on us.

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.

- 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. For example, 12 months elapsed between the date we filed our application to market Hextend in the United States and the date on which our application was approved. Approximately 36 months elapsed between the date we filed our application for approval to market Hextend in Canada, and the date on which our application was approved, even though we did not have to conduct any additional clinical trials.

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

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

- A product that is approved may be subject to restrictions on use.
- The FDA can recall or withdraw approval of a product if problems arise.
- We will face similar regulatory issues in foreign countries.

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

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

- Government-imposed restrictions on the use of embryos or hES cells in the United States and abroad could generally constrain stem cell research, thereby limiting the market and demand for our products. During March 2009, President Obama lifted certain restrictions on federal funding of research involving the use of hES cells, and in accordance with President Obama's Executive Order, the National Institutes of Health ("NIH") has adopted new guidelines for determining the eligibility of hES cell lines for use in federally funded research. The central focus of the proposed guidelines is to assure that hES cells used in federally funded research were derived from human embryos that were created for reproductive purposes, were no longer needed for this purpose, and were voluntarily donated for research purposes with the informed written consent of the donors. The hES cells that were derived from embryos created for research purposes rather than reproductive purposes, and other hES cells that were not derived in compliance with the guidelines, are not eligible for use in federally funded research. A lawsuit, *Sherley v. Sebelius*, is now pending, challenging the legality of the new NIH guidelines. In that litigation, a United States District Court issued a temporary injunction against the implementation of the new NIH guidelines, but the District Court's ruling has been vacated by the United States Court of Appeals. The ultimate resolution of that lawsuit could determine whether the federal government may fund research using hES cells, unless new legislation is passed expressly permitting or prohibiting such funding.

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

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

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

- Our success will depend in part on our ability to obtain and enforce patents and maintain trade secrets in the United States and in other countries. If we are unsuccessful at obtaining and enforcing patents, our competitors could use our technology and create products that compete with our products, without paying license fees or royalties to us.
- The preparation, filing, and prosecution of patent applications can be costly and time consuming. Our limited financial resources may not permit us to pursue patent protection of all of our technology and products throughout the world.
- Even if we are able to obtain issued patents covering our technology or products, we may have to incur substantial legal fees and other expenses to enforce our patent rights in order to protect our technology and products from infringing uses. We may not have the financial resources to finance the litigation required to preserve our patent and trade secret rights.

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

- We have filed patent applications for technology that we have developed, and we have obtained licenses for a number of patent applications covering technology developed by others, that we believe will be useful in producing new products, and which we believe may be of commercial interest to other companies that may be willing to sublicense the technology for fees or royalty payments. In the future, we may also file additional new patent applications seeking patent protection for new technology or products that we develop ourselves or jointly with others. However, there is no assurance that any of our licensed patent applications, or any patent applications that we have filed or that we may file in the future covering our own technology, either in the United States or abroad, will result in the issuance of patents.
- In Europe, the European Patent Convention prohibits the granting of European patents for inventions that concern “uses of human embryos for industrial or commercial purposes.” The European Patent Office is presently interpreting this prohibition broadly, and is applying it to reject patent claims that pertain to human embryonic stem cells. However, this broad interpretation is being challenged through the European Patent Office appeals system. As a result, we do not yet know whether or to what extent we will be able to obtain patent protection for our human embryonic stem cell technologies in Europe.

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

- The preparation and filing of patent applications, and the maintenance of patents that are issued, may require substantial time and money.
- A patent interference proceeding may be instituted with the United States Patent and Trademark Officer (“U.S. PTO”) when more than one person files a patent application covering the same technology, or if someone wishes to challenge the validity of an issued patent. At the completion of the interference proceeding, the PTO will determine which competing applicant is entitled to the patent, or whether an issued patent is valid. Patent interference proceedings are complex, highly contested legal proceedings, and the PTO’s decision is subject to appeal. This means that if an interference proceeding arises with respect to any of our patent applications, we may experience significant expenses and delay in obtaining a patent, and if the outcome of the proceeding is unfavorable to us, the patent could be issued to a competitor rather than to us.
- Oppositions to the issuance of patents may be filed under European patent law and the patent laws of certain other countries. As with the U.S. PTO interference proceedings, these foreign proceedings can be very expensive to contest and can result in significant delays in obtaining a patent or can result in a denial of a patent application.

Our patents may not protect our products from competition

We or our subsidiaries have patents in the United States, Canada, the European Union countries, Australia, Israel, Russia, South Africa, South Korea, Japan, Hong Kong, and Singapore, and have filed patent applications in other foreign countries for our plasma volume expander and stem cell products and technology.

- We might not be able to obtain any additional patents, and any patents that we do obtain might not be comprehensive enough to provide us with meaningful patent protection.
- There will always be a risk that our competitors might be able to successfully challenge the validity or enforceability of any patent issued to us.
- In addition to interference proceedings, the U.S. PTO can re-examine issued patents at the request of a third party seeking to have the patent invalidated. This means that patents owned or licensed by us may be subject to re-examination and may be lost if the outcome of the re-examination is unfavorable to us.

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

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

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

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

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

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

Risks Pertaining to Our Common Shares

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

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

- The market price of our shares, like that of the shares of many biotechnology companies, has been highly volatile.
- The price of our shares may rise rapidly in response to certain events, such as the commencement of clinical trials of an experimental new drug, even though the outcome of those trials and the likelihood of ultimate FDA approval remain uncertain.
- Similarly, prices of our shares may fall rapidly in response to certain events such as unfavorable results of clinical trials or a delay or failure to obtain FDA approval.
- The failure of our earnings to meet analysts' expectations could result in a significant rapid decline in the market price of our common shares.

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

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

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

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

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

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

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

In the future, we may issue our authorized but previously unissued equity securities, resulting in the dilution of the ownership interests of our present shareholders. We are currently authorized to issue an aggregate of 76,000,000 shares of capital stock consisting of 75,000,000 common shares and 1,000,000 “blank check” preferred shares. As of March 31, 2011, there were 3,173,273 common shares reserved for issuance upon the exercise of outstanding options under our employee stock option plans; and 649,513 shares reserved for issuance upon the exercise of common share purchase warrants. No preferred shares are presently outstanding.

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

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

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

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

Previously reported.

Item 3. Default Upon Senior Securities.

None.

Item 4. (Removed and Reserved)

Item 5. Other Information.

None.

Item 6. Exhibits

Exhibit Numbers	Description
2.1	Agreement and Plan of Merger, dated February 11, 2011, between Glycosan BioSystems, Inc., OrthoCyte Corporation, and BioTime, Inc. (1)
3.1	Articles of Incorporation with all amendments. (2)
3.2	By-Laws, As Amended. (3)
4.1	Warrant Agreement, dated March 21, 2011*
10.1	Memorandum of Tenancy, Renewal of Tenancy and letters of offer and acceptance of renewal of tenancy between ES Cell International Pte. Ltd. and Jurong Town Corporation (1)
10.2	Genome Office Tenancy Renewal, Renewal of Tenancy and letters of offer and acceptance of renewal of tenancy between ES Cell International Pte. Ltd. and Jurong Town Corporation (1)
10.3	License Agreement, dated February 15, 2006, between the University of Utah and Glycosan BioSystems, Inc., and amendments thereto*
10.4	LifeMap Sciences, Inc. 2011 Stock Option Plan Form of LifeMap Sciences, Inc. Stock Option Agreement*
31	Rule 13a-14(a)/15d-14(a) Certification.*
32	Section 1350 Certification.*
(1)	Incorporated by reference to BioTime's Form 10-K for the year ended December 31, 2010.
(2)	Incorporated by reference to Registration Statement on Form S-1, File Number 33-44549 filed with the Securities and Exchange Commission on December 18, 1991, and Amendment No. 1 and Amendment No. 2 thereto filed with the Securities and Exchange Commission on February 6, 1992 and March 7, 1992, respectively.
(3)	Incorporated by reference to Registration Statement on Form S-1, File Number 33-48717 and Post-Effective Amendment No. 1 thereto filed with the Securities and Exchange Commission on June 22, 1992, and August 27, 1992, respectively.
*	Filed herewith

SIGNATURES

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

BIOTIME, INC.

Date: May 3, 2011

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

Date: May 3, 2011

/s/ Robert W. Peabody
Robert W. Peabody
Chief Financial Officer

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*	Filed herewith

Warrant Agreement

Dated as of March 21, 2011

WARRANT AGREEMENT, (this "Agreement") dated as of March 21, 2011, by BioTime, Inc., a California corporation (the "Company"), for the benefit of each registered holder of a Warrant described herein (a AHolder@).

Section 1. Issuance of Warrants.

1.1 Number of Warrants; Expiration Date. The Company is issuing common share purchase warrants, as hereinafter described (the AWarrants@), to purchase up to an aggregate of 206,612 of its common shares, no par value (the ACommon Stock@), to the undersigned original Holders pursuant to an Agreement and Plan of Merger, by and among OrthoCyte Corporation, a California corporation ("OrthoCyte"), Glycosan BioSystems, a Delaware corporation ("Glycosan"), and the Company (the "Merger Agreement") with the Company. The Warrants shall be represented by a certificate in substantially the form of Exhibit A hereto. Subject to the terms of this Agreement, a Holder of any of such Warrant (including any Warrants into which a Warrant may be divided) shall have the right, which may be exercised, in whole or in part, at any time on or after the date hereof and prior to 5:00 p.m., New York Time on May 2, 2014 (the "Expiration Date"), to purchase from the Company, at the Warrant Price (as defined herein) then in effect, the number of fully paid and nonassessable common shares, no par value, of the Company ("Warrant Shares") determined as provided in this Agreement and specified in such Warrant. The original Holders were each stockholders of Glycosan prior to its merger with and into OrthoCyte pursuant to the Merger Agreement.

1.2 Form of Warrant. The text of the Warrants and of the Purchase Form shall be substantially as set forth in Exhibit A attached hereto. The price per Warrant Share and the number of Warrant Shares issuable upon exercise of each Warrant are subject to adjustment upon the occurrence of certain events, all as hereinafter provided. The Warrants shall be executed on behalf of the Company by its Chief Executive Officer, President, or one of its Vice Presidents, under its corporate seal reproduced thereon attested by its Chief Financial Officer, or Secretary or any Assistant Secretary. The signature of any such officers on the Warrants may be manual or facsimile, provided, however, that the signature of any such officers must be manual until such time as a warrant agent is appointed.

1.3 Signatures; Date of Warrants. Warrants bearing the manual or facsimile signatures of individuals who were at any time the proper officers of the Company shall bind the Company, notwithstanding that such individuals or any one of them shall have ceased to hold such offices prior to the delivery of such Warrants or did not hold such offices on the date of this Agreement. In the event that the Company shall appoint a warrant agent to act on its behalf in connection with the division, transfer, exchange or exercise of Warrants, the Warrants issued after the date of such appointment shall be dated as of the date of countersignature thereof by the warrant agent upon division, exchange, substitution or transfer. Until such time as the Company shall appoint a warrant agent, Warrants shall be dated as of the date of execution thereof by the Company either upon initial issuance or upon division, exchange, substitution or transfer.

1.4 Countersignature of Warrants. In the event that the Company shall appoint a warrant agent to act on its behalf in connection with the division, transfer, exchange or exercise of Warrants, the Warrants issued after the date of such appointment shall be countersigned by the warrant agent (or any successor to the warrant agent then acting as warrant agent) and shall not be valid for any purpose unless so countersigned. Warrants may be countersigned, however, by the warrant agent (or by its successor as warrant agent hereunder) and may be delivered by the warrant agent, notwithstanding that the persons whose manual or facsimile signatures appear thereon as proper officers of the Company shall have ceased to be such officers at the time of such countersignature, issuance or delivery. The warrant agent (if so appointed) shall, upon written instructions of the President, Chief Executive Officer, an Executive or Senior Vice President, or the Chief Financial Officer of the Company, countersign, issue and deliver the Warrants and shall countersign and deliver Warrants as otherwise provided in this Agreement.

Section 2. Exercise of Warrants: Restrictions.

2.1 Exercise of Warrants. A Warrant may be exercised upon surrender of the certificate or certificates evidencing the Warrant to be exercised, together with the form of election to purchase on the reverse thereof duly filled in and signed, to the Company at its principal office (or if appointed, the principal office of the warrant agent) and upon payment of the Warrant Price (as defined and determined in accordance with the provisions of Section 3 and Section 6 to the Company (or if appointed, to the warrant agent for the account of the Company), for the number of Warrant Shares in respect of which such Warrants are then exercised. Payment of the aggregate Warrant Price shall be made by bank wire transfer to the account of the Company or bank cashier's check.

(a) Subject to Section 2.2 and Section 5, upon the surrender of the Warrant and payment of the Warrant Price as aforesaid, the Company (or if appointed, the warrant agent) shall promptly, and in any event within three (3) business days, cause to be issued and delivered to or upon the written order of the Holder and in such name or names as the Holder may designate, a certificate or certificates for the number of full Warrant Shares so purchased upon the exercise of such Warrant, together with cash, as provided in Section 8, in respect of any fractional Warrant Shares otherwise issuable upon such exercise. Such Warrant Share certificate or certificates shall be deemed to have been issued and any person so designated to be named therein shall be deemed to have become a holder of record of such Warrant Shares as of the date of the surrender of such Warrants and payment of the Warrant Price, as aforesaid. The rights of purchase represented by the Warrant shall be exercisable, at the election of the Holder thereof, either in full or from time to time in part. In the event that a certificate evidencing the Warrant is exercised in respect of less than all of the Warrant Shares purchasable on such exercise at any time prior to the date of expiration of the Warrant, a new certificate evidencing the unexercised portion of the Warrant will be issued, and the warrant agent (if so appointed) is hereby irrevocably authorized to countersign and to deliver the required new Warrant certificate or certificates pursuant to the provisions of this Section 2.1. The Company, whenever required by the warrant agent (if appointed), will supply the warrant agent with Warrant certificates duly executed on behalf of the Company for such purpose.

(b) In the event the Company issues warrants in the future which contain a "net exercise" provision, the Warrant shall be deemed automatically amended to allow holder the right to exercise the Warrant on the same net exercise terms.

2.2 Restrictions on Exercise of Warrants. The Warrants may not be exercised unless registered under the Securities Act of 1933, as amended (the “Act”) or an exemption from such registration is available.

(a) Unless the Warrant and Warrant Shares have been registered under the Act and under any applicable state securities laws, each person who is exercising a Warrant will be required to give written certification that he, she or it is an “accredited investor” or a written opinion of counsel, acceptable to the Company and to the transfer agent of the Common Stock, to the effect that exercise of the Warrant and the issuance of the Warrant Shares are exempt from registration under the Act and under any applicable state securities laws.

(b) The Company shall be entitled to obtain, as a condition precedent to its issuance of any certificates representing Warrant Shares or any other securities issuable upon any exercise of a Warrant, a letter or other instrument from the Holder containing such covenants, representations or warranties by such Holder as reasonably deemed necessary by the Company to effect compliance by the Company with the requirements of the Act and any other applicable United States federal and/or state securities laws.

(c) Any exercise, attempt to exercise, or purported exercise of a Warrant in violation of the restrictions set forth in this Section 2.2 shall be deemed null and void and of no binding effect.

(d) The Company will issue instructions to the transfer agent and registrar of its Common Stock to refuse to issue any Warrant Shares not made pursuant to registration under the Act and applicable state securities laws, or pursuant to an available exemption from registration under the Act and applicable state securities laws.

Section 3. Warrant Price. Subject to any adjustments required by Section 6, the price per share at which Warrant Shares shall be purchasable upon exercise of a Warrant (as to any particular Warrant, the “Warrant Price”) shall be Ten Dollars (\$10.00) per share.

Section 4. Transferability of Warrants and Warrant Shares; Restrictions on Transfer.

4.1 Registration. Each Warrant shall be numbered and shall be registered on the books of the Company (the “Warrant Register”) as issued. The Company and the warrant agent (if appointed) shall be entitled to treat the Holder of any Warrant as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim or interest in such Warrant 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.

4.2 Transfer. Subject to Section 4.3, the Warrants shall be transferable only on the Warrant Register upon delivery of the 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 (or the warrant agent, if appointed). In case of transfer by executors, administrators, guardians or other legal representatives, duly authenticated evidence of their authority shall be produced, and may be required to be deposited and remain with the Company (or the warrant agent, if appointed) in its discretion. Upon any registration of transfer, the Company shall execute and deliver (or if appointed, the warrant agent shall countersign and deliver) a new Warrant or Warrants to the persons entitled thereto.

4.3 Restrictions on Transfer of Warrants and Warrant Shares. The Warrants, and any Warrant Shares issued upon the exercise of the Warrants, may not be sold, pledged, hypothecated, transferred or assigned, in whole or in part, unless a registration statement under the Act, and under any applicable state securities laws, is effective therefor or, an exemption from such registration is then available, and an opinion of counsel, acceptable to the Company and to the transfer agent or warrant agent, if any, has been rendered stating that such sale, pledge, hypothecation, transfer or assignment will not violate the Act or any other United States federal or state securities laws. Notwithstanding anything herein to the contrary, no registration statement or opinion of counsel shall be required for any transfer of any Warrant Shares in compliance with Rule 144 or Rule 144A under the Securities Act.

(a) As a condition precedent to the registration of transfer and issuance of any certificates representing Warrants or Warrant Shares upon transfer, the Company shall be entitled to obtain a letter or other instrument from the Holder containing such covenants, representations or warranties by such Holder as reasonably deemed necessary by the Company to effect compliance by the Company with the requirements of the Act and any other applicable federal and/or state securities laws.

(b) Any sale, pledge, hypothecation, transfer, or assignment of a Warrant or Warrant Shares in violation of the foregoing restrictions shall be deemed null and void and of no binding effect.

(c) The Company will issue instructions to any warrant agent that may be appointed, and to the transfer agent and registrar of its Common Stock, to refuse to register the transfer of any Warrant and Warrant Shares not made pursuant to registration under the Act and applicable state securities laws, or pursuant to an available exemption from registration under the Act and applicable state securities laws.

Section 5. Payment of Taxes. The Company will pay all documentary stamp taxes, if any, attributable to the initial issuance of Warrant Shares upon the exercise of Warrants; provided, however, that the Company shall not be required to pay any tax or taxes which may be payable in respect of any transfer involved in the issue or delivery of any Warrant or certificates for Warrant Shares in a name other than that of the registered Holder of such Warrants or Warrant Shares.

Section 6. Adjustment of Warrant Price and Number of Warrant Shares. The number and kind of securities purchasable upon the exercise of each Warrant and the Warrant Price shall be subject to adjustment from time to time upon the happening of certain events, as hereinafter defined.

6.1 Adjustments. The number of Warrant Shares purchasable upon the exercise of each Warrant and the Warrant Price shall be subject to adjustment as follows:

(a) If the Company 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 each 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 (a) shall become effective immediately after the effective date of such event retroactive to the record date, if any, for such event.

(b) If the Company 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 offering price of the total number of shares of Common Stock so offered would purchase at the current market price per share of Common Stock 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) If the Company 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 defined in 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 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) For the purpose of any computation under paragraphs (b) and (c) of this Section 6.1, the current market price per share of Common Stock at any date shall be the average of the daily closing prices for the 20 consecutive trading days ending one trading day prior to the date of such computation. The closing price for each day shall be the last reported sales price regular way or, in case no such reported sale takes place on such day, the average of the closing bid and asked prices regular way for such day, in each case on the principal national securities exchange on which the shares of Common Stock are listed or admitted to trading or, if not so listed or admitted to trading, the last sale price of the Common Stock on the OTC Bulletin Board, or any comparable system. If the current market price of the Common Stock cannot be so determined, the Board of Directors of the Company shall reasonably determine the current market price on the basis of such quotations as are available.

(e) No adjustment in the number of Warrant Shares purchasable hereunder 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 each 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 hereunder, to the nearest tenth of a share and with respect to the Warrant Price payable hereunder, to the nearest whole cent.

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

(g) 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 each Holder of Warrants the rights options, warrants, or convertible or exchangeable securities, or evidences of indebtedness or assets referred to in those paragraphs which each Holder of Warrants would have been entitled to receive had the Warrants 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) For the purpose of this Warrant, the term “Common Stock” shall mean (i) the class of stock designated as the common shares or common stock of the Company at the date of this Agreement, or (ii) any other class of stock resulting from successive changes or reclassifications of such shares consisting solely of changes in par value, or from par value to no par value, or from no par value to par value. In the event that at any time, as a result of an adjustment made pursuant to paragraph (a) above, the Holders shall become entitled to purchase any securities of the Company other than shares of Common Stock, thereafter the number of such other shares so purchasable upon exercise of each Warrant, and the Warrant Price of such shares, shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to the Warrant Shares contained in paragraphs (a) through (i), inclusive, and the provisions of Section 6.3 and Section 8, with respect to the Warrant Shares, shall apply on like terms to any such other securities.

(i) Upon the expiration of any rights, options, warrants or conversion or exchange privileges, if any thereof shall not have been exercised, the Warrant Price and the number of Warrant Shares purchasable upon the exercise of each 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.

6.2 Notice of Adjustment. Whenever the number of Warrant Shares purchasable upon the exercise of each Warrant or the Warrant Price of such Warrant Shares is adjusted, as herein provided, the Company shall, or in the event that a warrant agent is appointed, the Company shall cause the warrant agent, promptly, in any event within ten (10) days send to each 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 Warrant Price of such Warrant 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.

6.3 No Adjustment for Dividends. Except as provided in Section 6.1, no adjustment in respect of any dividends shall be made during the term of a Warrant or upon the exercise of a Warrant.

6.4 Preservation of Purchase Rights Upon Merger, Consolidation, etc. In case of 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, the Company or such successor or purchasing corporation, as the case may be, shall execute an agreement that each Holder shall have the right thereafter, upon such Holder's election, either (i) upon payment of the Warrant Price in effect immediately prior to such action, to purchase upon exercise of each Warrant the kind and amount of shares and other securities and property (including cash) which the Holder would have owned or have been entitled to receive after the happening of such consolidation, merger, sale, transfer or lease had such Warrant been exercised immediately prior to such action (such shares and other securities and property (including cash) being referred to as the “Sale Consideration”) or (ii) to receive, in cancellation of such Warrant (and in lieu of paying the Warrant price and exercising such Warrant), the Sale Consideration less a portion thereof having a fair market value (as reasonably determined by the Company) equal to the Warrant Price (it being understood that, if the Sale Consideration consists of more than one type of shares, other securities or property, the amount of each type of shares, other securities or property to be received shall be reduced proportionately); provided, however, that no adjustment in respect of dividends, interest or other income on or from such shares or other securities and property shall be made during the term of a Warrant or upon the exercise of a Warrant. The Company shall mail by first class mail, postage prepaid, to each Holder, notice of the execution of any such agreement. Such agreement shall provide for adjustments, which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Section 6. The provisions of this paragraph shall similarly apply to successive consolidations, mergers, sales, transfers or leases. The warrant agent (if appointed) shall be under no duty or responsibility to determine the correctness of any provisions contained in any such agreement relating to the kind or amount of shares of stock or other securities or property receivable upon exercise of Warrants or with respect to the method employed and provided therein for any adjustments and shall be entitled to rely upon the provisions contained in any such agreement.

6.5 Statement on Warrants. Irrespective of any adjustments in the Warrant Price or the number or kind of shares purchasable upon the exercise of the Warrants, Warrants issued before or after such adjustment may continue to express the same price and number and kind of shares as are stated in the Warrants initially issuable pursuant to this Agreement.

Section 7. Reservation of Warrant Shares: Purchase and Cancellation of Warrants.

7.1 Reservation of Warrant Shares. There have been reserved, and the Company shall at all times keep reserved, out of its authorized Common Stock, a number of shares of Common Stock sufficient to provide for the exercise of the rights of purchase represented by the outstanding Warrants and any additional Warrants issuable hereunder. The Transfer Agent for the Common Stock and every subsequent transfer agent for any shares of the Company's capital stock issuable upon the exercise of any of the rights of purchase aforesaid will be irrevocably authorized and directed at all times to reserve such number of authorized shares as shall be required for such purpose. The Company will keep a copy of this Agreement on file with the Transfer Agent for the Common Stock and with every subsequent transfer agent for any shares of the Company's capital stock issuable upon the exercise of the rights of purchase represented by the Warrants. The warrant agent, if appointed, will be irrevocably authorized to requisition from time to time from such Transfer Agent the stock certificates required to honor outstanding Warrants upon exercise thereof in accordance with the terms of this Agreement. The Company will supply such Transfer Agent with duly executed stock certificates for such purposes and will provide or otherwise make available any cash which may be payable as provided in Section 8. The Company will furnish such Transfer Agent a copy of all notices of adjustments and certificates related thereto, transmitted to each Holder pursuant to Section 6.2.

7.2 Purchase of Warrants by the Company. The Company shall have the right, except as limited by law, other agreements or herein, with the consent of the Holder, to purchase or otherwise acquire Warrants at such times, in such manner and for such consideration as it may deem appropriate.

7.3 Cancellation of Warrants. In the event the Company shall purchase or otherwise acquire Warrants, the same shall thereupon be cancelled and retired. The warrant agent (if so appointed) shall cancel any Warrant surrendered for exchange, substitution, transfer or exercise in whole or in part.

Section 8. Fractional Interests. The Company shall not be required to issue fractional Warrant Shares on the exercise of Warrants. If more than one Warrant shall be presented for exercise in full at the same time by the same Holder, the number of full Warrant Shares which shall be issuable upon the exercise thereof shall be computed on the basis of the aggregate number of Warrant Shares purchasable on exercise of the Warrants so presented. If any fraction of a Warrant Share would, except for the provisions of this Section 8, be issuable on the exercise of any Warrant (or specified portion thereof), the Company shall pay an amount in cash equal to the average of the daily closing sale prices (determined in accordance with paragraph 6.1(d)) per share of Common Stock for the 20 consecutive trading days ending one trading day prior to the date the Warrant is presented for exercise, multiplied by such fraction.

Section 9. Exchange of Warrant Certificates. Each Warrant certificate may be exchanged, at the option of the Holder thereof, for another Warrant certificate or Warrant certificates in different denominations entitling the Holder or Holders thereof to purchase a like aggregate number of Warrant Shares as the certificate or certificates surrendered then entitle the Holder to purchase. Any Holder desiring to exchange a Warrant certificate or certificates shall make such request in writing delivered to the Company at its principal office (or, if a warrant agent is appointed, the warrant agent at its principal office) and shall surrender, properly endorsed, the certificate or certificates to be so exchanged. Thereupon, the Company (or, if appointed, the warrant agent) shall execute and deliver to the person entitled thereto a new Warrant certificate or certificates, as the case may be, as so requested, in such name or names as such Holder shall designate.

Section 10. Listing of Warrant Shares on Securities Exchange. The Company will promptly use commercially reasonable efforts to cause the Warrant Shares to be listed, subject to official notice of issuance, on the principal national securities exchanges on which the Common Stock is listed and whose rules and regulations require such listing, as soon as practicable following the date of this Warrant Agreement.

Section 11. Mutilated or Missing Warrants. In case any of the certificates evidencing the Warrants shall be mutilated, lost, stolen or destroyed, the Company may in its discretion issue and deliver (and, if appointed, the warrant agent shall countersign and deliver) in exchange and substitution for and upon cancellation of the mutilated Warrant certificate, or in lieu of and substitution for the Warrant certificate lost, stolen or destroyed, a new Warrant certificate of like tenor, but only upon receipt of evidence reasonably satisfactory to the Company and the warrant agent (if so appointed) of such loss, theft or destruction of such Warrant, and an indemnity or bond, if requested, also reasonably satisfactory to them. An applicant for such a substitute Warrant certificate shall also comply with such other reasonable regulations and pay such other reasonable charges as the Company (or the warrant agent, if so appointed) may prescribe.

Section 12. No Rights as Shareholders; Notices to Holders. Nothing contained in this Agreement or in any of the Warrants shall be construed as conferring upon the Holders or their transferees the right to vote or to receive dividends or to consent or to receive notice as shareholders in respect of any meeting of shareholders for the election of directors of the Company or any other matter, or any rights whatsoever as shareholders of the Company. If, however, at any time prior to the expiration of the Warrants and prior to their exercise, any of the following events shall occur: (a) the Company shall declare any dividend payable in any securities upon its shares of Common Stock or make any distribution (other than a regular cash dividend, as such dividend may be increased from time to time, or a dividend payable in shares of Common Stock) to the holders of its shares of Common Stock; or (b) the Company shall offer to the holders of its shares of Common Stock on a pro rata basis any cash, additional shares of Common Stock or other securities of the Company or any right to subscribe for or purchase any thereof; or (c) a dissolution, liquidation or winding up of the Company (other than in connection with a consolidation, merger, sale, transfer or lease of all or substantially all of its property, assets, and business as an entirety) shall be proposed, then in any one or more of said events the Company shall (i) give notice in writing of such event as provided in Section 14 and (ii) if the Warrants have been registered pursuant to the Act, cause notice of such event to be published once in The Wall Street Journal (national edition), such giving of notice and publication to be completed at least 10 days prior to the date fixed as a record date or the date of closing the transfer books for the determination of the stockholders entitled to such dividend, distribution, or subscription rights or for the determination of stockholders entitled to vote on such proposed dissolution, liquidation or winding up or the date of expiration of such offer. Such notice shall specify such record date or the date of closing the transfer books or the date of expiration, as the case may be. Failure to publish, mail or receive such notice or any defect therein or in the publication or mailing thereof shall not affect the validity of any action in connection with such dividend, distribution or subscription rights, or such proposed dissolution, liquidation or winding up, or such offer.

Section 13. Appointment of Warrant Agent. At such time as the Company shall register Warrants under the Act, the Company shall appoint a warrant agent to act on behalf of the Company in connection with the issuance, division, transfer and exercise of Warrants. At such time as the Company appoints a warrant agent, the Company shall enter into a new Warrant Agreement with the warrant agent pursuant to which all new Warrants will be issued upon registration of transfer or division, which will reflect the appointment of the warrant agent, as well as additional customary provisions as shall be reasonably requested by the warrant agent in connection with the performance of its duties. In the event that a warrant agent is appointed, the Company shall (i) promptly notify the Holders of such appointment and the place designated for transfer, exchange and exercise of the Warrants, and (ii) take such steps as are necessary to insure that Warrants issued prior to such appointment may be exchanged for Warrants countersigned by the warrant agent.

Section 14. Notices; Principal Office. Any notice pursuant to this Agreement by the Company or by any Holder to the warrant agent (if so appointed), or by the warrant agent (if so appointed) or 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 (a) to the Company, at its office, Attention: Chief Financial Officer, or (b) to the warrant agent, at its offices as designated at the time the warrant agent is appointed. The address of the principal office of the Company is 1301 Harbor Bay Parkway, Suite 100, Alameda, California 94502. Any notice given pursuant to this Agreement by the Company or the warrant agent to a Holder shall be in writing and shall be mailed first class, postage prepaid, or sent by air delivery service, or otherwise delivered to such Holder at the Holder's address on the books of the Company or the warrant agent, as the case may be. 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.

Section 15. Successors. Except as expressly provided herein to the contrary, all the covenants and provisions of this Agreement by or for the benefit of the Company and the Holder shall bind and inure to the benefit of their respective successors and permitted assigns hereunder.

Section 16. Legends. The Warrants shall bear an appropriate legend, conspicuously disclosing the restrictions on exercise under Section 2.2, and the Warrants and Warrant Shares shall bear an appropriate legend, conspicuously disclosing the restrictions on transfer under Section 4.3 until the same are registered for sale under the Act or are transferred in a transaction exempt from registration under the 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 Act. The Company agrees that upon the sale of the Warrants and Warrant 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 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 remove such legend; provided, that unless the request for removal of the legend is in connection with a sale registered under the Act, the Holder shall have provided an opinion of counsel, acceptable to the Company and the transfer agent or warrant agent, as applicable, to the effect that such legend may be removed in compliance with the Act.

Section 17. Applicable Law. This Agreement and each Warrant issued hereunder shall be governed by and construed in accordance with the laws of the State of California, without giving effect to principles of conflict of laws.

Section 18. Benefits of this Agreement. This Agreement shall be for the sole and exclusive benefit of the Company, the warrant agent and the Holders of the Warrants. Nothing in this Agreement shall be construed to give to any person or corporation other than the Company, the warrant agent (if appointed) and the Holders any legal or equitable right, remedy or claim under this Agreement.

Section 19. Counterparts. This Agreement may be executed in any number of counterparts (including by separate counterpart signature pages) and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts shall together constitute but one and the same instrument.

Section 20. Captions. The captions of the Sections and subsections of this Agreement have been inserted for convenience only and shall have no substantive effect.

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

BIOTIME, INC.,
a California corporation

By: s/Michael D. West
Michael D. West,
Chief Executive Officer

Attest:

By: s/Judith Segall
Judith Segall, Secretary

EXHIBIT A

THIS WARRANT HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER APPLICABLE STATE SECURITIES LAWS. THIS WARRANT MAY NOT BE EXERCISED, SOLD, PLEDGED, HYPOTHECATED, TRANSFERRED OR ASSIGNED EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS, OR PURSUANT TO AN AVAILABLE EXEMPTION FROM REGISTRATION. HEDGING TRANSACTIONS INVOLVING THIS WARRANT OR ANY COMMON STOCK OR OTHER SECURITIES ISSUABLE UPON EXERCISE OF THIS WARRANT MAY NOT BE CONDUCTED UNLESS IN COMPLIANCE WITH THE ACT

VOID AFTER 5:00 P.M. NEW YORK TIME, May 2, 2014

Certificate No.

Warrant to Purchase

[Insert number of Shares]

Shares of Common Stock

**BIOTIME, INC.
COMMON STOCK PURCHASE WARRANTS**

This certifies that, for value received, _____ or registered assigns (the "Holder"), is entitled to purchase from BioTime, Inc. a California corporation (the "Company"), at a purchase price per share of Ten Dollars (\$10.00) (the "Warrant Price"), the number of its Common Shares, no par value per share (the "Common Stock"), shown above. The number of shares purchasable upon exercise of the Common Stock Purchase Warrants (the "Warrants") and the Warrant Price are subject to adjustment from time to time as set forth in the Warrant Agreement referred to below. Outstanding Warrants not exercised prior to 5:00 p.m., New York time, on May 2, 2014 shall thereafter be void.

Subject to restriction specified in the Warrant Agreement, Warrants may be exercised in whole or in part by presentation of this Warrant Certificate with the Purchase Form on the reverse side hereof duly executed, and simultaneous payment of the Warrant Price (or as otherwise set forth in Section 6.4 of the Warrant Agreement) at the principal office of the Company (or if a warrant agent is appointed, at the principal office of the warrant agent). Payment of the Warrant Price shall be made by bank wire transfer to the account of the Company or by bank cashier's check as provided in Section 2.1 of the Warrant Agreement. As provided in the Warrant Agreement, the Warrant Price and the number or kind of shares which may be purchased upon the exercise of the Warrant evidenced by this Warrant Certificate are, upon the happening of certain events, subject to modification and adjustment.

This Warrant Certificate is issued under and in accordance with a Warrant Agreement dated as of _____, 2011, and is subject to the terms and provisions contained in the Warrant Agreement, to all of which the Holder of this Warrant Certificate by acceptance of this Warrant Certificate consents. A copy of the Warrant Agreement may be obtained by the Holder hereof upon written request to the Company. In the event that pursuant to Section 13 of the Warrant Agreement a warrant agent is appointed and a new warrant agreement entered into between the Company and such warrant agent, then such new warrant agreement shall constitute the Warrant Agreement for purposes hereof and this Warrant Certificate shall be deemed to have been issued pursuant to such new warrant agreement.

Upon any partial exercise of the Warrant evidenced by this Warrant Certificate, there shall be issued to the Holder hereof a new Warrant Certificate in respect of the shares of Common Stock as to which the Warrant evidenced by this Warrant Certificate shall not have been exercised. This Warrant Certificate may be exchanged at the office of the Company (or the warrant agent, if appointed) by surrender of this Warrant Certificate properly endorsed either separately or in combination with one or more other Warrant Certificates for one or more new Warrant Certificates evidencing the right of the Holder thereof to purchase the aggregate number of shares as were purchasable on exercise of the Warrants evidenced by the Warrant Certificate or Certificates exchanged. No fractional shares will be issued upon the exercise of any Warrant, but the Company will pay the cash value thereof determined as provided in the Warrant Agreement. This Warrant Certificate is transferable at the office of the Company (or the warrant agent, if appointed) in the manner and subject to the limitations set forth in the Warrant Agreement.

The Holder hereof may be treated by the Company, the warrant agent (if appointed), and all other persons dealing with this Warrant Certificate as the absolute owner hereof for any purpose and as the person entitled to exercise the rights represented hereby, or to the transfer hereof on the books of the Company, any notice to the contrary notwithstanding, and until such transfer on such books, the Company (and the warrant agent, if appointed) may treat the Holder hereof as the owner for all purposes.

Neither the Warrant nor this Warrant Certificate entitles any Holder to any of the rights of a stockholder of the Company.

[This Warrant Certificate shall not be valid or obligatory for any purpose until it shall have been countersigned by the warrant agent.] *

DATED:

(Seal)

BIOTIME, INC.

By: _____
Title: _____

Attest: _____

[COUNTERSIGNED:
WARRANT AGENT

By: _____]*
Authorized Signature

* To be part of the Warrant only after the appointment of a warrant agent pursuant to Section 13 of the Warrant Agreement.

PURCHASE FORM

(To be executed upon exercise of Warrant)

To BioTime, Inc.:

The undersigned hereby irrevocably elects to exercise the right of purchase represented by the within Warrant Certificate for, and to purchase thereunder, _____ shares of Common Stock, as provided for therein, and tenders herewith payment of the Warrant Price in full in the form of a bank wire transfer to the account of the Company or by bank cashier's check in the amount of \$_____.

Please issue a certificate or certificates for such shares of Common Stock in the name of, and pay any cash for any fractional share to:

(Please Print Name)

(Please Print Address)

(Social Security Number or
Other Taxpayer Identification Number)

(Signature)

NOTE: The above signature should correspond exactly with the name on the face of this Warrant Certificate or with the name of the assignee appearing in the assignment form below.

And, if said number of shares shall not be all the shares purchasable under the within Warrant Certificate, a new Warrant Certificate is to be issued in the name of said undersigned for the balance remaining of the share purchasable thereunder less any fraction of a share paid in cash.

ASSIGNMENT

(To be executed only upon assignment of Warrant Certificate)

For value received, _____ hereby sells, assigns and transfers unto _____ the within Warrant Certificate, together with all right, title and interest therein, and does hereby irrevocably constitute and appoint _____ attorney, to transfer said Warrant Certificate on the books of the within-named Company, with full power of substitution in the premises.

Dated: _____

(Signature)

NOTE: The above signature should correspond exactly with the name on the face of this Warrant Certificate.

EXCLUSIVE LICENSE AGREEMENT

dated February 7, 2006

between

GLYCOSAN BIOSYSTEMS, Inc.

and

UNIVERSITY OF UTAH RESEARCH FOUNDATION

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LICENSE AGREEMENT

THIS LICENSE Agreement (“AGREEMENT”) is entered into this 7th day of February, 2006 by and between the UNIVERSITY OF UTAH RESEARCH FOUNDATION, a Utah non-profit corporation, having its principal place of business at 615 Arapeen Drive, Suite 310, Salt Lake City, UT 84108, hereinafter referred to as “Licensor,” and Glycosan BioSystems, Inc., having its principal place of business at PO Box 2321, Park City, UT 84060, hereinafter referred to as “Licensee.”

WITNESSETH

WHEREAS, certain inventions, generally characterized as and assigned University of Utah identification number U-3405, “*In situ* Crosslinkable Synthetic Extracellular Matrices”, and U-3656, “Novel Chemical Modifications of Hyaluronan”, hereinafter collectively referred to as “the INVENTION”, have been made in the course of research at the University of Utah conducted by Glenn Prestwich, Xiao-Zhang Shu, Yi Luo, Kelly Kirker and Yanchun Liu and are Covered By Patent Rights (as defined below);

WHEREAS, Licensor desires that the Patent Rights be developed and utilized to the fullest extent so that their benefits can be enjoyed by the general public;

WHEREAS, Licensee wishes to obtain from Licensor a license under certain rights for the commercial development, production, manufacture, use and sale of the Patent Rights, and Licensor is willing to grant such a license upon the terms and conditions hereinafter set forth;

WHEREAS, the Patent Rights were developed in the course of research sponsored in part by the U.S. Government, and as a consequence are subject to overriding obligations of Licensor to the U.S. Government;

NOW THEREFORE, for and in consideration of the covenants, conditions and undertakings hereinafter set forth, the parties hereby agree as follows:

ARTICLE I. DEFINITIONS

1.1 “**Affiliate**” means any person or Entity that controls, is controlled by, or is under common control with Licensee, directly or indirectly. For purposes of this definition, “control” and its various inflected forms means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such person or Entity, whether through ownership of voting securities, by contract or otherwise.

1.2 “...**Covered By**...” shall mean a Licensed Product that, when made, used, or sold, or a Licensed Method that, when practiced, would constitute, but for the license granted to Licensee pursuant to this Agreement, an infringement of any claim or claims included within the Patent Rights.

1.3 “**Effective Date**” means the date on which the license issue fee is paid. If such fee is not paid within twenty one (21) days of license execution this Agreement will terminate.

1.4 “**Entity**” means a corporation, an association, a joint venture, a partnership, a trust, a business, an institution, an individual, a government or political subdivision thereof, including an agency, or any other organization that can exercise independent legal standing.

1.5 “**Fair Market Value**” means the cash consideration which Licensee or its Sublicensee would realize from an unAffiliated, unrelated buyer in an arm’s length sale of an identical item sold in the same quantity, under the same terms, and at the same time and place.

1.6 “**Field of Use**” shall mean exclusive use all of Patent Rights excluding human and animal therapeutics, animal health, medical devices and pharmaceutical uses and applications.

1.7 “**Insolvent**” means being unable to meet one’s debt obligations to another Entity as such debt obligations become due and not being able to provide reasonable financial assurances of becoming able to meet such obligations.

1.8 “**Licensed Method**” shall mean any method, procedure, process or other subject matter, the manufacture, use or sale of which is Covered By any claim or claims included within the Patent Rights.

1.9 “**Licensed Product**” shall mean any product, apparatus, kit or component part thereof, or any other subject matter the manufacture, use or sale of which is Covered By any claim or claims included within the Patent Rights.

1.10 “**Net Sales**” shall mean gross revenue, monies, cash equivalent and/or transfer for any consideration, including revenue neutral remuneration received by Licensee, Affiliates or in the case of a sublicense by Sublicensee (as defined below), for (a) any Licensed Product sold or leased, and (b) services performed using any Licensed Product or Licensed Method, in all cases, net of the sum of the following items directly attributable to the sale of such Licensed Product or Licensed Method and specifically identified on the invoice, and borne by the seller : (1) cash, trade or quantity discounts actually allowed; (2) sales, use, tariff, customs duties or other excise taxes directly imposed upon particular sales; (3) outbound transportation charges prepaid or allowed; and (4) allowances or credits to third parties for rejections or returns. A Licensed Product and services performed using a Licensed Product or Licensed Method shall be considered sold when billed out or invoiced or, if not invoiced, when delivered or performed. There shall be no deductions from Net Sales for costs of commissions or collections.

1.11 “**Patent Rights**” shall mean and include all of the following Licensor intellectual property: The United States patents and/or patent applications listed in Exhibit “A”; United States patents issued from the applications listed in Exhibit “A” and from divisionals and continuations (other than continuations-in-part) of these applications and any reissues of such United States patents; claims of continuation-in-part applications and patents directed to subject matter specifically described in the applications listed in Exhibit “A”; and claims of all foreign applications and patents which are directed to subject matter specifically described in the United States patents and/or patent applications listed in Exhibit “A”.

1.12 “**Sublicensee**” means any party other than an Affiliate that enters into an agreement or arrangement with Licensee or receives a license grant from Licensee under the Licensed Patents to manufacture, have manufactured, offer for sale, sell, lease, and/or import the Licensed Product or Licensed Method, subject to the then-current applicable article, item, service, technology, and technical data-specific requirements of the U.S. export laws and regulations.

1.13 “**Sales and Product-Marketing Partner**” shall mean an entity who within three (3) years of the Effective Date, invests in Licensee and receives the right to modify and sale but not make Licensed Product purchased from Licensee.

1.14 “**Territory**” shall mean worldwide, where patent coverage applies.

ARTICLE 2. LICENSE GRANT

2.1 Exclusive Grant. Subject to the terms and conditions set forth herein, Licensor hereby grants to Licensee a royalty-bearing exclusive license to make, have made, use and sell any Licensed Product and to practice any Licensed Method in the Field of Use under Licensor’s Patent Rights throughout the Territory. This grant is subject to the payment by Licensee to Licensor of all consideration required under this Agreement, to any rights of the Government of the United States as set forth in Section 2.2, and is further subject to rights retained by Licensor and University to:

- a. publish the general scientific findings from research conducted in whole or in part at the University related to Patent Rights; and
- b. manufacture, have manufactured, use, or transfer Patent Rights for research, teaching and other educationally-related purposes

2.2 US Government Grant. The license granted in Section 2.1 hereof is expressly made subject to a non-exclusive, irrevocable, royalty-free license heretofore granted to the U.S. Government and in the general form as attached hereto as Exhibit "B" and incorporated herein by reference.

2.3 Affiliates. Licensee may extend the license granted herein to any Affiliate if the Affiliate consents in writing to be bound by this Agreement to the same extent as Licensee.

2.4 Sublicensing. Licensor hereby grants to Licensee the right to enter into sublicensing agreements to third parties (hereinafter referred to as "Sublicensees") provided that Licensee has current exclusive rights thereto in the Territory being sublicensed pursuant to Section 2.1 and subject to the following:

- a. Any sublicense granted by Licensee to a Sublicensee shall incorporate all of the terms and conditions of this Agreement, which shall be binding upon each Sublicensee as if such Sublicensee were a party to this Agreement. Licensee shall collect and guarantee all payments due Licensor from Sublicensees. In each such sublicense, the Sublicensee will be prohibited from granting further sublicenses.
- b. If Licensee becomes Insolvent, Licensor's proportionate share of all payments then or thereafter due and owing to Licensee from its Sublicensees for the sublicense of the Patent Rights will, upon notice from Licensor to any such Sublicensee, become payable directly to Licensor; provided however, that Licensor will remit to Licensee the amount by which such payments exceed the amounts owed by Licensee to Licensor.
- c. Licensee shall within thirty (30) days of: (a) execution, provide Licensor with a copy of each sublicense granted by Licensee hereunder and any amendments thereto or terminations thereof; and (b) upon receipt, summarize and deliver copies of all reports due to Licensee from Sublicensees.
- d. Upon any termination of this Agreement, Sublicensees rights shall at Licensor's option, be (i) assigned to and assumed by Sublicensee, or (ii) terminated.

ARTICLE 3. TERM OF AGREEMENT

This Agreement shall be in full force and effect from the EFFECTIVE DATE until the end of the term of the last-to-expire of Licensor's Patent Rights licensed under this Agreement unless otherwise terminated by operation of law or by acts of the parties pursuant to the terms of this Agreement.

ARTICLE 4. FEES & ROYALTIES

4.1 License Issue Fee. Licensee shall pay to Licensor a non-refundable License Issue Fee of ten percent (10%) of all shares outstanding for Glycosan BioSystems, Inc. at the time of execution of this Agreement, which fee is not an advance against earned royalties.

4.2 License Maintenance Fee. Licensee will pay a license maintenance fee, until such time as royalties are paid, in the amount of five thousand dollars (\$5,000), due and payable on the first anniversary of the Effective Date.

4.3 Running Royalty. As consideration for the license under this Agreement, Licensee shall pay to Licensor an earned royalty of three percent (3%) of Net Sales. Earned royalties shall accrue in each country for the duration of Patent Rights in that country.

- a. If any patent or any claim thereof included within Licensor's Patent Rights shall be found invalid by a court of competent jurisdiction and last resort, from which decision no appeal may be taken, Licensee's obligation to pay Licensor royalties based on such patent or claim or any claim patentably indistinct therefrom shall cease as of the date of such decision. Licensee shall not, however, be relieved from paying Licensor any royalties, fees, expenses, or other liabilities that accrued prior to the date of such decision or that are based on any of Licensor's Patent Rights not the subject of such decision.

4.4 Minimum Royalty. Commencing with the second anniversary of the Effective Date Licensee shall pay to Licensor, within thirty (30) days of each anniversary of the Effective Date a minimum annual royalty as provided below:

YEAR 2	\$ 7,500
YEAR 3	\$ 15,000
YEAR 4	\$ 22,500
YEAR 5	\$ 30,000 (and Beyond)

Licensee shall continue to pay such minimum annual royalty until the end of the term of the last to expire of Licensor's Patent Rights. Licensor shall fully credit each payment of minimum annual royalties against any earned royalties payable by Licensee with respect to the year in which the minimum annual royalty is made.

4.5 Sublicense Fees and Royalties. In consideration for the sublicense, Licensee shall pay to Licensor thirty percent (30%) of any lump-sum fee or advance payment received by Licensee from any Sublicensee, regardless of how the Licensee and Sublicensee characterizes such payments, including but not limited to license fees, minimum annual royalties, milestone payments, etc. Licensee shall not receive from Sublicensees anything of value in lieu of cash payments in consideration for any sublicense under this Agreement without the express prior written permission of Licensor. In addition, Licensee shall pay to Licensor a royalty on Net Sales made under any sublicense which royalty rate shall be thirty percent (30%) of the royalty rate charged by Licensee on Net Sales by such Sublicensee, and in no event shall the royalty paid to Licensor be reduced to less than one percent of Sublicensee Net Sales.

4.6 Sales and Product-Marketing Agreements. For a period of three (3) years following the Effective Date, Licensee may enter into a sales and product-marketing agreement with a Sales and Product-Marketing Partner. Such agreements may entail an initial fee regarded as an investment into Licensee and an exclusive sales agreement for Licensed Product sold and not royalty revenues. Licensee may retain any initial upfront lump-sum one time fee, not to exceed five million dollars (\$5,000,000) with out obligation to Licensor. Licensee shall pay to Licensor a royalty on sales to a Sales and Product-Marketing Partner of five percent (5%) of Net Sales as long as the Sales and Product-Marketing Partner is a customer. Licensee shall within thirty (30) days of execution, provide Licensor with a copy of each agreement with a Marketing and Distribution Partner.

ARTICLE 5. COMMERCIAL DILIGENCE & MILESTONES

5.1 Commercial Diligence. Upon execution of this Agreement, Licensee shall diligently proceed with the development, manufacture, sale and use of Licensed Products and/or Licensed Methods in order to make them readily available to the general public as soon as possible on commercially reasonable terms. Licensee shall continue active, diligent marketing efforts for one or more Licensed Product(s) and/or Licensed Method(s) throughout the term of this Agreement ("Actively Commercializing"). In addition, Licensee shall perform at least the following obligations as part of its due diligence activities hereunder:

- (a) Licensee shall deliver to Licensor within six (6) months from Effective Date, a complete and accurate commercialization plan detailing each phase of development, the target markets and time frames toward first sale of the Licensed Products and Licensed Methods.

- (b) Licensee shall submit within eight (8) months from Effective Date, at least one grant application regarding development of technology licensed in this Agreement.
- (c) Licensee shall secure within one year from Effective Date office and laboratory space to conduct its business.
- (d) Licensee shall spend at least three hundred thousand dollars (\$300,000) on research, development and commercialization of Licensed Products and/or Licensed Methods during the two-year period following the date of this Agreement. Included in such expense shall be normal corporate start-up costs including, but not limited to, corporate overhead such as rent, salaries and benefits, insurance, legal, and laboratory and equipment acquisition
- (e) Net Sales shall have occurred on or before the second anniversary of the Effective Date.

5.2 Milestones and Fees. Licensee shall pay a patent issue fee of five thousand dollars upon issuance of each U.S. patent Covered By this Agreement. Such patent issue fee shall only be required for the first five (5) U.S. patents issued. If three (3) or more licensees have rights for distinct and separate fields of use for the same issued patent, at the time the patent issues, the patent issue fee shall be two thousand five hundred dollars (\$2,500). Each required payment will be paid to Licensor within thirty (30) days of completion of each milestone listed above.

ARTICLE 6. EQUITY OWNERSHIP

In consideration of the rights granted to Licensee by Licensor in this Agreement, Licensee will, within twenty one (21) days after execution of this agreement, issue to Licensee fully authorized, fully paid Shares of Stock equaling ten percent (10%) of all outstanding Shares for Glycosan BioSystems, Inc. as of the Effective Date. Thereafter, Licensee shall issue additional Shares to Licensor in order to maintain a ten percent (10%) ownership in Glycosan BioSystems, Inc. until such time as Glycosan BioSystems has reached a valuation of one million dollars (\$1,000,000), as assessed by a third party with potential to acquire Licensee, or the second (2) anniversary of the Effective date. Such Shares will be issued in the name of the Licensor and be subject to acceptance by Licensor of the terms and conditions set forth in Licensee's usual and customary Stock Purchase Agreement, and related agreements governing shareholder rights, containing terms and conditions common to all other investors. At any time up to and including reaching a one million dollar (\$1,000,000) valuation, or prior to the second (2) anniversary of the Effective Date, Licensee may redeem Licensor shares for one hundred thousand dollars (\$100,000). If Licensor owns stock on or after the sixth anniversary of the Effective Date, Licensor has the option of receiving from Licensee three (3) annual payments of fifty thousand dollars (\$50,000) as payment for Licensor's interest in Glycosan BioSystems, Inc.

ARTICLE 7. CONFIDENTIALITY

7.1 Confidentiality. Licensee and Licensor acknowledge that either party may provide certain information to the other about the INVENTION that is considered to be confidential. Licensee and Licensor shall take reasonable precautions to protect such confidential information. Such precautions shall involve at least the same degree of care and precaution that the recipient customarily uses to protect its own confidential information.

7.2 GRAMA. Licensee acknowledges that Licensor is subject to the Utah Governmental Records Access and Management Act ("GRAMA"), Section 63-2-101 et seq., Utah Code Ann. (1953), as amended. Licensor shall keep confidential any information provided to Licensor by Licensee that Licensee considers confidential, to the extent allowable under GRAMA and as provided in Section 53B-16-301 et seq., Utah Code Ann. In order to be eligible for such protection under GRAMA, confidential information of Licensee disclosed to Licensor must be in written or other tangible form, marked as proprietary, and accompanied by a written claim by Licensee stating the reasons that such information must be kept confidential.

ARTICLE 8. QUARTERLY & ANNUAL REPORTS

8.1 Quarterly Royalty Report. Within thirty (30) days after the calendar year in which Net Sales first occur, and within 30 days after each calendar quarter thereafter, Licensee shall provide Licensor with a written report detailing all sales and uses, if any, made of Licensed Products and Licensed Methods during the preceding calendar quarter, and detailing the amount of Net Sales made during such quarter and calculating the royalties due pursuant to Sections 6.1 and 4.3 hereof. Each report shall include at least the following:

- a. number of Licensed Products manufactured, leased and sold by and/or for Licensee, Affiliates and all Sublicensees;
- b. accounting for all Licensed Methods used or sold by and/or for Licensee, Affiliates and all Sublicensees;
- c. accounting for Net Sales, noting the deductions applicable as provided in Section 1.10;
- d. royalties due under Section 4.4;
- e. running royalties due under Section 4.3 and 4.6;
- f. royalties due on other payments from Sublicensees and assignees under Section 4.5;
- g. total royalties due;
- h. names and addresses of all Sublicensees of Licensee;
- i. the amount spent on product development; and
- j. the number of full-time equivalent employees working on the Licensed Products and/or Licensed Methods.

Each report shall be in substantially similar form as Exhibit "C" attached hereto. Each such report shall be signed by an officer of Licensee (or the officer's designee). With each such report submitted, Licensee shall pay to Licensor the royalties and fees due and payable under this Agreement. If no royalties shall be due, Licensee shall so report. Licensee's failure to submit a Royalty Report in the required form will constitute a breach of this Agreement. Licensee will continue to deliver Royalty Reports to Licensor after the termination or expiration of this Agreement until such time as all Licensed Product(s) permitted to be sold after termination have been sold or destroyed.

8.2 Progress Report and Commercialization Plan. Commencing on July 1, 2006, and on each January 1 and July 1 thereafter, until the first occurrence of Net Sales and annually thereafter each January 1, Licensee shall submit to Licensor a written report covering Licensee's (and any Sublicensee's) progress in (a) development and testing of all Licensed Products and Licensed Methods; (b) achieving the due diligence milestones specified herein; and (c) preparing, filing, and obtaining of any approvals necessary for marketing the Licensed Products and Licensed Methods and (d) plans for the upcoming year in commercializing the Licensed Product(s). Each report shall be in substantially similar form and contain at least the information required by Exhibit "D" attached hereto and incorporated herein.

8.3 Reporting First Foreign Sales. In addition to the regular reports required by Section 8.1 and 8.2, Licensee shall provide a written report to Licensor of the date of first occurrence of Net Sales in each country within sixty (60) days of its occurrence.

ARTICLE 9. PAYMENTS, RECORDS AND AUDITS

9.1 Payments. Licensee shall pay all royalties accruing to Licensor in U.S. Dollars, without deduction of exchange, collection, wiring fees, bank fees, or any other charges, within thirty (30) days following the calendar quarter in which Net Sales occur. Each payment will reference U#'s U-3405 and U-3656. All payments to Licensor will be made in United States dollars by wire transfer or check payable to "University of Utah Research Foundation" and sent to:

Technology Commercialization Office
Attn: Accounts Receivable
The University of Utah
615 Arapeen Dr. #310
Salt Lake City, UT 84108

9.2 Late Payments. In the event royalty payments or other fees are not received by Licensor when due hereunder, Licensee shall pay to Licensor interest charges at the rate of twelve percent (12%) per annum on the total royalties or fees due for the reporting period.

9.3 Records. Licensee shall keep, and cause its Sublicensees and Affiliates to keep, complete, true and accurate records and books containing all particulars that may be necessary for the purpose of showing the amounts payable to Licensor hereunder. Records and books shall be kept at Licensee's principle place of business or the principal place of business of the appropriate division of Licensee to which this Agreement relates.

9.4 Audit. Said books and the supporting data shall be open at all reasonable times for five (5) years following the end of the calendar year to which they pertain, to inspection by Licensor or its agents, upon reasonable prior notice to Licensee, for the purpose of verifying Licensee's royalty statement or compliance in other respects with this Agreement. Such access will be available to Licensor upon not less than ten (10) days written notice to Licensee, not more than once each calendar year of the Term, during normal business hours, and once a year for three years after the expiration or termination of this Agreement. Should such inspection lead to the discovery of a greater than five percent (5%) or \$5,000 US, discrepancy in reporting to Licensor's detriment, Licensee agrees to pay the full cost of such inspection. Whenever Licensee has its books and records audited by an independent certified public accountant, Licensee will, within thirty (30) days of the conclusion of such audit, provide Licensor with a written statement, certified by said auditor, setting forth the calculation of royalties due to Licensor over the time period audited as determined from the books and records of the Licensee.

ARTICLE 10. PATENT PROSECUTION AND MAINTENANCE

10.1 Future Patent Expenses. Presently, a third party has acquired rights to a separate and distinct field of use and is committed to pay two thirds (2/3) of the patent costs for the Patent Rights licensed under this Agreement. For the duration of the third party rights, or prior to termination thereof, Licensee will pay for costs forward after the Effective Date, one third of all expenses for filing, prosecuting, enforcing, and maintaining the Patent Rights that are licensed to Licensee, including without limitation, any taxes on such Patent Rights within thirty (30) days of invoice. In the event that subsequent license agreements for separate and distinct fields of use are entered into by Licensor and the prior licensee is still in effect, Licensee and subsequent licensee's shall pay equal shares of the remaining one third (1/3) portion of patent costs. In the event that this prior license fails to continue, Licensee and any subsequent licensee's will equally be responsible for all of patent costs relating to Patent Rights.

10.2 Failure to Pay Patent Expenses. In the event that Licensee fails to pay any patent expenses required under this Agreement within sixty (60) days of receipt of notification that such expenses are due, Licensee will be required within the following thirty (30) days to establish with a leading and first class bank subject to approval by Licensor, an irrevocable and, if so requested by Licensor, confirmed letter of credit (not restricted, unless otherwise agreed upon) in the amount of ten thousand dollars (\$10,000) in favor of Licensor available immediately to secure the payment of patent expenses due under this Agreement. Licensor may draw upon such letter of credit upon presentation of the letter notifying Licensee of patent expenses due and payable and a statement from Licensor of Licensee's failure to pay. In the event that Licensee does not establish such letter of credit within such thirty (30) day period, Licensor may terminate this Agreement. Should Licensee decline or fail to pay the costs and legal fees for the preparation, prosecution and maintenance of any patent or patent application under this Agreement, Licensor may at its discretion, either exclude by written notice the patent or patent application from this Agreement without terminating the agreement in its entirety and Licensee shall have no further rights thereto, or Licensor may terminate this Agreement in full pursuant to Section 12.1. Any exclusion pursuant to this section shall not relieve Licensee of any obligation or liability accrued hereunder prior to such exclusion, or rescind or give rise to any right to rescind any payments made or other consideration given to Licensor hereunder prior to the time such exclusion becomes effective. Such exclusion shall not affect in any manner any obligation due Licensor by Licensee arising under this Agreement prior to the date of such exclusion.

10.3 Patent Counsel. Licensor will work closely with Licensee to develop a suitable strategy for the prosecution and maintenance of all Licensed Patents. Licensor will provide copies of documents prepared by patent counsel to Licensee for review and comment prior to filing to the extent practicable under the circumstances. Licensee will be billed and will pay all documented costs and fees and other charges incident to the preparation, prosecution, and maintenance of the Licensed Patents within thirty (30) days of receipt of invoice from the selected patent attorney. All patent applications and patents will be in the name of Licensor, owned by Licensor and included as part of the Patent Rights licensed pursuant to this Agreement.

ARTICLE 11. PATENT MARKING

Licensee shall permanently and legibly mark all Licensed Products made, used or sold under the terms of this Agreement, or their containers, in accordance with patent notice appropriate under Title 35, United States Code.

ARTICLE 12. TERMINATION BY LICENSOR

12.1 Licensee Violations. If Licensee should: (a) fail to deliver to Licensor any statement or report required hereunder when due; (b) fail to make any payment at the time that the same should be due; (c) violate or fail to perform any covenant, condition, or undertaking of this Agreement to be performed by it hereunder; (d) cease Actively Commercializing Licensed Product(s); (e) fail to have a Sale of Licensed Product(s) within two (2) years after the Effective Date; or (f) file a bankruptcy action, or have a bankruptcy action against it, or become Insolvent; enter into a composition with creditors, or have a receiver appointed for it; then Licensor may give written notice of such default to Licensee. If Licensee should fail to cure such default within thirty (30) days of such notice, the rights, privileges, and license granted hereunder shall automatically terminate.

12.2 Business Failure. If Licensee shall cease to carry on its business with respect to the rights granted in this Agreement, this Agreement shall terminate upon thirty (30) days written notice by Licensor.

12.3 Obligations After Termination. No termination of this Agreement by Licensor shall relieve Licensee of its obligation to pay any monetary obligation due or owing at the time of such termination and shall not impair any accrued right of Licensor. Licensee shall pay all attorneys' fees and costs incurred by Licensor in enforcing any obligation of Licensee or accrued right of Licensor. Articles 7, 9.2, 9.3, 12.3, 15.2, 15.3, 20, 24, 26, 27 and 28. shall survive any termination of this Agreement.

ARTICLE 13. TERMINATION BY LICENSEE

13.1 Voluntary Termination. Licensee may terminate this Agreement, in whole or as to any specified patent, at any time and from time to time without cause, by giving written notice thereof to Licensor. Such termination shall be effective forty five (45) days after such notice and all Licensee's rights associated therewith shall cease as of that date

13.2 Obligations After Termination. Any termination pursuant to Section 13.1 shall not relieve Licensee of any obligation or liability accrued hereunder prior to such termination, or rescind or give rise to any right to rescind any payments made or other consideration given to Licensor hereunder prior to the time such termination becomes effective. Such termination shall not affect in any manner any rights of Licensor arising under this Agreement prior to the date of such termination.

ARTICLE 14. DISPOSITION OF LICENSED PRODUCTS ON HAND

Upon expiration or termination of this Agreement by either party, Licensee shall provide Licensor with a written inventory of all Licensed Products in process of manufacture, in use or in stock. Licensee may dispose of any such Licensed Products within the ninety (90) day period following such expiration or termination, provided, however, that Licensee shall pay royalties and render reports to Licensor thereon in the manner specified herein.

ARTICLE 15. WARRANTY BY LICENSOR

15.1 **Right to License.** Licensor warrants that it has the lawful right to grant the license set forth in this Agreement.

15.2 **EXCEPT AS EXPRESSLY PROVIDED IN SECTION 15.1, THE PARTIES ACKNOWLEDGE AND AGREE THAT LICENSOR HAS MADE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL LICENSOR BE HELD RESPONSIBLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF PATENT RIGHTS, EVEN IF LICENSOR IS ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH DAMAGES.**

15.3 **Limitations.** Nothing in this Agreement shall be construed as:

- a. a warranty or representation by Licensor as to the validity or scope of any Patent Rights.
- b. a warranty or representation by Licensor that anything made, used, sold or otherwise disposed of pursuant to any license granted under this Agreement is or will be free from infringement of intellectual property rights of third parties.
- c. an obligation by Licensor to bring or prosecute actions or suits against third parties for patent infringement, except as expressly provided in Article 16 hereof.
- d. conferring by implication, estoppel or otherwise any license or rights under any patents of Licensor other than Patent Rights.

15.4 **Remedy for Breach of Warranty.** Any breach of the representations or warranties made in this Article 15 shall entitle Licensee to a refund of all payments made to Licensor as consideration for the rights granted under this Agreement, and said refund shall be the sole remedy available to Licensee for breach or violation of any provisions contained in this Article 15.

ARTICLE 16. INFRINGEMENT

16.1 **Knowledge of Infringement.** If either party learns of a claim of infringement of or by any of Licensor's Patent Rights licensed under this Agreement, that party shall give written notice of such claim to the other party. Licensor shall then use reasonable efforts to terminate such infringement. In the event Licensor fails to abate the infringing activity within ninety (90) days after such written notice or to bring legal action against the third party, Licensee may bring suit for patent infringement. No settlement, consent judgment or other voluntary final disposition of the suit may be entered into without the consent of Licensor, which consent shall not be unreasonably withheld.

16.2 **Expense and Proceeds from Legal Action.** Any such legal action shall be at the expense of the party by whom suit is filed, hereinafter referred to as the "Litigating Party". Any damages or costs recovered by the Litigating Party in connection with a legal action filed by it hereunder, and remaining under the Litigating Party is reimbursed for its costs and expenses reasonably incurred in the lawsuit, and after any royalties or other payments due to Licensor under Article 4 are paid, shall be equally divided between Licensee and Licensor.

16.3 Cooperation in Litigation Proceedings. Licensee and Licensor shall cooperate with each other in litigation proceedings instituted hereunder, provided that such cooperation shall be at the expense of the Litigating Party, and such litigation shall be controlled by the Litigating Party.

ARTICLE 17. INSURANCE

17.1 Insurance Requirements. Beginning at the time any Licensed Product is being distributed or Sold (including for the purpose of obtaining any required regulatory approvals) by Licensee or a Sublicensee, Licensee will, at its sole cost and expense, procure and maintain commercial general liability insurance issued by an insurance carrier with an A.M. Best rating of "A" or better in amounts not less than \$1,000,000 per incident and \$1,000,000 annual aggregate. Licensee will use reasonable efforts to have the Indemnities named as additional insured's. All rights of subrogation will be waived against Licensor and its insurers. Such commercial general liability insurance will provide (i) product liability coverage; (ii) broad form contractual liability coverage for Licensee's indemnification under this Agreement; and (iii) coverage for litigation costs. The specified minimum insurance amounts will not constitute a limitation on Licensee's obligation to indemnify the Indemnities under this Agreement.

17.2 Evidence of Insurance and Notice of Changes. Licensee will provide Licensor with written evidence of such insurance upon request of Licensor. Licensee will provide Licensor with written notice of at least thirty (30) days prior to the cancellation, non-renewal, or material change in such insurance.

17.3 Continuing Insurance Obligations. Licensee will maintain such commercial general liability insurance beyond the expiration or termination of this Agreement during (i) the period that any Licensed Product(s) developed pursuant to this Agreement is being commercially distributed or Sold by Licensee, any Affiliate, or any Sublicensee or agent of Licensee; and (ii) for five (5) years after such period.

ARTICLE 18. WAIVER

No waiver by either party hereto of any breach or default of any of the covenants or agreements herein set forth shall be deemed a waiver as to any subsequent and/or similar breach or default.

ARTICLE 19. ASSIGNABILITY

This Agreement is not assignable or otherwise transferable (including by operation of law, merger, or other business combination) by Licensee without the prior written consent of Licensor. The failure of Licensee to comply with the terms of this paragraph shall be grounds for termination of the Agreement by Licensor under Article 12. In the event that written consent is provided by Licensor, Licensee will pay a non-refundable fee of thirty thousand dollars (\$30,000) if the total transaction value is less than twenty five million dollars (\$25 million), and ninety thousand dollars (\$90,000) if the total transaction value exceeds twenty five million dollars (\$25 million) upon the consummation of the assignment or transfer.

ARTICLE 20. INDEMNIFICATION BY LICENSEE

Licensee shall indemnify, hold harmless and defend Licensor, the University of Utah, and their respective officers, employees and agents, against any and all claims, suits, losses, damages, costs, liabilities, fees and expenses (including reasonable fees of attorneys) resulting from or arising out of exercise of: (a) any license granted under this Agreement; or (b) any act, error, or omission of Licensee, its agents, employees or Sublicensees, except where such claims, suits, losses, damages, costs, fees, or expenses result solely from the negligent acts or omissions, or willful misconduct of the Licensor, its officers, employees or agents. Licensee shall give Licensor timely notice of any claim or suit instituted of which Licensee has knowledge that in any way, directly or indirectly, affects or might affect Licensor, and Licensor shall have the right at its own expense to participate in the defense of the same.

ARTICLE 21. INDEMNIFICATION BY LICENSOR

The Licensor is a governmental entity and is subject to the Utah Governmental Immunity Act, Section 63-30(d)-101 *et seq.*, Utah Code Ann. (the "Act"). Subject to the provision of the Act, Licensor shall indemnify, defend and hold harmless Licensee, its officers, agents and employees against any and all claims, suits, losses, damages, costs, liabilities, fees, and expenses (including reasonable fees of attorneys) resulting solely from the negligent acts or omissions of Licensor, its officers, agents or employees in connection with this Agreement. Nothing in this Agreement shall be construed as a waiver of any rights or defenses applicable to Licensor under the Act, including without limitation, the provisions of Section 63-30(d)-604 regarding limitation of judgments. Licensor shall give Licensee timely notice of any claim or suit instituted of which Licensor has knowledge that in any way, directly or indirectly, affects or might affect Licensee, and Licensee shall have the right at its own expense to participate in the defense of the same.

ARTICLE 22. NOTICES

Any payment, notice or other communication required or permitted to be given to either party hereto shall be in writing and shall be deemed to have been properly given and effective: (a) on the date of delivery if delivered in person during recipient's normal business hours; or (b) on the date of attempted delivery if delivered by courier, express mail service or first-class mail, registered or certified. Such notice shall be sent or delivered to the respective addresses given below, or to such other address as either party shall designate by written notice given to the other party as follows:

In the case of Licensee:

Glycosan BioSystems, Inc.
PO Box 2321
Park City, UT 84060

In the case of Licensor:

UNIVERSITY OF UTAH RESEARCH FOUNDATION
Technology Commercialization Office
615 Arapeen Drive, Suite 310
Salt Lake City, UT 84108

With a copy to:

OFFICE OF GENERAL COUNSEL
University of Utah
309 Park Building
Salt Lake City, Utah 84112

ARTICLE 23. REGULATORY COMPLIANCE

23.1 Registration of Agreement. When required by local/national law, Licensee shall register this Agreement, pay all costs and legal fees connected therewith, and otherwise insure that the local/national laws affecting this Agreement are fully satisfied.

23.2 Compliance With U.S. Law. Licensee shall comply with all applicable U.S. laws dealing with the export and/or management of technology or information. Licensee understands that the Arms Export Control Act (AECA), including its implementing International Traffic In Arms Regulations (ITAR,) and the Export Administration Act (EAA), including its Export Administration Regulations (EAR), are some (but not all) of the laws and regulations that comprise the U.S. export laws and regulations. Licensee further understands that the U.S. export laws and regulations include (but are not limited to): (1) ITAR and EAR product/service/data-specific requirements; (2) ITAR and EAR ultimate destination-specific requirements; (3) ITAR and EAR end user-specific requirements; (4) ITAR and EAR end use- specific requirements; (5) Foreign Corrupt Practices Act; and (6) anti-boycott laws and regulations. Licensee will comply with all then-current applicable export laws and regulations of the U.S. Government (and other applicable U.S. laws and regulations) pertaining to the Licensed Product(s) (including any associated products, items, articles, computer software, media, services, technical data, and other information). Licensee certifies that it will not, directly or indirectly, export (including any deemed export), nor re-export (including any deemed re-export) the Licensed Product(s) (including any associated products, items, articles, computer software, media, services, technical data, and other information) in violation of U.S. export laws and regulations or other applicable U.S. laws and regulations. Licensee will include an appropriate provision in its agreements with its authorized Sublicensees to assure that these parties comply with all then-current applicable U.S. export laws and regulations and other applicable U.S. laws and regulations

23.3. Location of Manufacture. Licensee agrees that products used or sold in the United States embodying Licensed Products or produced through use of the Licensed Method shall be manufactured substantially in the United States, unless a written waiver is obtained in advance from Licensor.

ARTICLE 24. GOVERNING LAW

This Agreement shall be interpreted and construed in accordance with the laws of the State of Utah, without application of any principles of choice of laws.

ARTICLE 25. RELATIONSHIP OF PARTIES

In assuming and performing the obligations of this Agreement, Licensee and Licensor are each acting as independent parties and neither shall be considered or represent itself as a joint venture, partner, agent or employee of the other.

ARTICLE 26. USE OF NAMES

26.1 By Licensee. Licensee may use the name “The University of Utah” in factually based materials related to the Licensed Products and the business of the Licensee; provided, however, that Licensee may not use the name of University in connection with any name, brand or trademark related to Licensed Products or Licensed Methods. For example, Licensee may include a statement in promotional materials that refers to the fact that a product or service is based on technology developed at The University of Utah; Licensee may not include The University of Utah in a product or service name.

26.2 By Licensor. Licensor may use Licensee’s name in connection with University’s publicity related to University intellectual property and commercialization achievements.

ARTICLE 27. DISPUTE RESOLUTION

Except for the right of either party to apply to a court of competent jurisdiction for a temporary restraining order, a preliminary injunction, or other equitable relief to preserve the status quo or prevent irreparable harm, any and all claims, disputes or controversies arising under, out of, or in connection with the Agreement, including but not limited to any dispute relating to patent validity or infringement, which the parties shall be unable to resolve within sixty (60) days shall be mediated in good faith. The party raising such dispute shall promptly advise the other party of such dispute. By not later than five (5) business days after the recipient has received such notice of dispute, each party shall have selected for itself a representative who shall have the authority to bind such party, and shall additionally have advised the other party in writing of the name and title of such representative. By not later than ten (10) days after the date of such notice of dispute, the party against whom the dispute shall be raised shall select a mediator in the Salt Lake City area and such representatives shall schedule a date with such mediator for a hearing. The parties shall enter into good faith mediation and shall share the costs equally. If the representatives of the parties have not been able to resolve the dispute within fifteen (15) business days after such mediation hearing, then any and all claims, disputes or controversies arising under, out of, or in connection with this Agreement, including any dispute relating to patent validity or infringement, shall be resolved through arbitration if the parties mutually consent, or through any judicial proceeding either in the courts of the State of Utah or in the United States District Court for the District of Utah, to whose jurisdiction for such purposes Licensee and Licensor each hereby irrevocably consents and submits. All costs and expenses, including reasonable attorneys’ fees, of the prevailing party in connection with resolution of a dispute by arbitration or litigation of such controversy or claim shall be borne by the other party.

ARTICLE 28. GENERAL PROVISIONS

28.1 The headings of the several sections are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.

28.2 This Agreement shall not be binding upon the parties until it has been signed herein below by or on behalf of each party, and as of the EFFECTIVE DATE.

28.3 No amendment or modification of this Agreement shall be valid or binding upon the parties unless made in writing and signed by both parties.

28.4 This Agreement embodies the entire understanding of the parties and supersedes all previous communications, representations or understandings, either oral or written, between the parties relating to the subject matter thereof.

28.5 The provisions of this Agreement are severable, and in the event that any provision of this Agreement shall be determined to be invalid or unenforceable under any controlling body of the law, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining provisions hereof.

28.6 This Agreement may be signed in counterparts, each of which when taken together shall constitute one fully executed document. Each individual executing this Agreement on behalf of a legal Entity does hereby represent and warrant to each other person so signing that he or she has been duly authorized to execute this Agreement on behalf of such Entity.

28.7 In the event of any litigation, arbitration, judicial reference or other legal proceeding involving the parties to this Agreement to enforce any provision of this Agreement, to enforce any remedy available upon default under this Agreement, or seeking a declaration of the rights of either party under this Agreement, the prevailing party shall be entitled to recover from the other such attorneys' fees and costs as may be reasonably incurred, including the costs of reasonable investigation, preparation and professional or expert consultation incurred by reason of such litigation, arbitration, judicial reference, or other legal proceeding.

IN WITNESS WHEREOF, Licensor and Licensee have executed this Agreement by their respective officers hereunto duly authorized, on the day and year hereinafter written.

“Licensee”

GLYCOSAN BIOSYSTEMS, Inc.

By _____ /s/ William P. Tew
(Signature)

Name _____ William P. Tew, Ph.D.
(Please Print)

Title _____ President & CEO

Date _____

“Licensor”

UNIVERSITY OF UTAH
RESEARCH FOUNDATION

By _____ /s/ Raymond F. Gesteland
(Signature)

Name _____ Raymond F. Gesteland

Title _____ President

Date _____

EXHIBIT "A"**Patent Rights**

U No.	Matter	Application No. Date of Filing	Title	Inventor(s)
U-3405	21101.0036U1 Provisional	60/390,504 6/21/2002	Disulfide Crosslinked Hyaluronan Hydrogels	Glenn Preswich, Xiao Shu, Yi Luo, Kelly Kirker
U-3405	21101.0036P1 PCT	PCT/US03/15519 5/15/03	Crosslinked Compounds and Methods of Making and Using Thereof	Glenn Preswich, Xiao Shu, Yi Luo, Kelly Kirker
U-3405	21101.0036U2 Nationalized, United States	10/519,173 12/20/04	Crosslinked Compounds and Methods of Making and Using Thereof	Glenn Preswich, Xiao Shu, Yi Luo, Kelly Kirker
U-3405	21101.0036CA1 Nationalized, Canada	2,489,712 5/15/03	Crosslinked Compounds and Methods of Making and Using Thereof	Glenn Preswich, Xiao Shu, Yi Luo, Kelly Kirker
U-3405	21101.0036EP1 Nationalized, Europe	03799796.2 5/15/03	Crosslinked Compounds and Methods of Making and Using Thereof	Glenn Preswich, Xiao Shu, Yi Luo, Kelly Kirker
U-3656	21101.0051P1 Provisional	60/526,797 12/4/2003	Modified Macromolecules and Methods of Making and Using Thereof	Glenn Prestwich, Xiao Shu
U-3656	21101.0051U1 PCT	PCT/US04/040726 12/6/2004	Modified Macromolecules and Methods of Making and Using Thereof	Glenn Prestwich, Xiao Shu

EXHIBIT "B"

LICENSE TO THE UNITED STATES GOVERNMENT

This instrument confers to the United States Government, as represented by the _____, a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced on its behalf throughout the world the following subject invention. This license will extend to all divisions or continuations of the patent application and all patents or reissues, which may be granted thereon:

Invention Title:

Inventor(s):

Patent Application Serial No.:

Filing Date:

Country, if other than United States:

This subject invention was conceived and/or first actually reduced to practice in performance of a government-funded project, Grant No.:

Principal rights to this subject invention have been left with the Licensor: University of Utah Research Foundation, subject to the provisions of 37 CFR 401 and 45 CFR 8.

Signed: _____

Date: _____

Name: Raymond F. Gesteland

Title: President

EXHIBIT "C"

**Quarterly Report
for**

(title) _____, U- _____

Date: _____

Period Covered: _____

Royalties

A. Number of units sold: _____

B. Price per unit: _____

C. Gross sales amount (AxB): _____

D. Deductions:

Discounts allowed (case, trade, quantity) _____

Taxes imposed on sales (sales, use, etc.) _____

Transportation charges (outbound or prepaid) _____

Allowances (rejections and returns) _____

Total Deductions _____

E. Net Sales (C-D): _____

F. Total royalty due (___% of E) _____

G. Total royalty payment made _____

EXHIBIT "D"

**Due Diligence
for**

(title) _____, U- _____

Date: _____

Period Covering: _____

Progress Regarding Specific Due Diligence Milestones:

Projected Date of First Sale: _____

Please provide the commercial name of any FDA-approved products, utilizing this invention, that have first reached the market during the designated reporting period. This information is necessary for federal funding reporting requirements.

Product Name(s): _____

Yes No In the designated reporting period, did your company or any Sublicensee of the above referenced technology have 500 or more employees? This information is required to determine and report large or small entity status in the United States.

Yes No In the designated reporting period, did your company or any Sublicensee of the above referenced technology have more than 50 employees? This information is required to determine and report large or small entity status in Canada.

AMENDMENT

This Amendment ("AMENDMENT") is made and is effective as of May 9, 2006, by and between Glycosan BioSystems, Inc. ("LICENSEE"), having an address at PO Box 2321, Park City, Utah 84060 and the University of Utah Research Foundation ("LICENSOR"), having an address at 615 Arapeen Drive, Suite 310, Salt Lake City, Utah, 84108. LICENSEE and the LICENSOR are referred to herein collectively as "PARTIES".

Recital

WHEREAS, the PARTIES have previously entered into a License Agreement on February 15, 2006 ("AGREEMENT") to technologies entitled "*In situ* Crosslinkable Synthetic Extracellular Matrices" (U-3405) and "Novel Chemical Modifications of Hyaluronan" (U-3656); and

WHEREAS, the PARTIES wish to amend the AGREEMENT with respect to sections 1.6 and 5.2 of the License Agreement;

NOW THEREFORE, the PARTIES agree to amend the AGREEMENT as follows;

Section 1.6 of the AGREEMENT is hereby deleted in its entirety and replaced with the following;

Section 1.6 **"Field of Use"** shall mean exclusive use all of PATENT RIGHTS excluding human and animal therapeutics, animal health, medical devices and pharmaceutical uses and applications. Including but not limited to uses in cosmetics, uses in topical delivery of compounds which are not FDA-regulated therapeutic agents, reagents and platforms for in vitro cell and tissue culture, platforms and services for in vitro drug toxicology and efficacy testing, materials for preserving or extending the useful life of human organs and tissues, in vivo xenograft models using human tissues, and any other uses not specifically excluded. **"Field of Use"** shall also mean co-exclusive use of PATENT RIGHTS to products and methods in which living tissue or cells are incorporated outside the body into a polymer platform at a facility other than the point-of-care facility, and the resulting hybrid device is then subsequently implanted in humans for therapeutic use ("TISSUE ENGINEERED PRODUCTS"). These co-exclusive rights shall be shared with no more that one other licensee and include Sublicensing rights consistent with the AGREEMENT.

Section 5.2 of the AGREEMENT is hereby deleted in its entirety and replaced with the following;

Section 5.2 Milestones and Fees.

- (a) Licensee shall pay a patent issue fee of five thousand dollars upon issuance of each U.S. patent COVERED BY this AGREEMENTgr. Such patent issue fee shall only be required for the first five (5) U.S. patents issued. If three (3) or more licensees have rights for distinct and separate fields of use for the same issued patent, at the time the patent issues, the patent issue fee shall be two thousand five hundred dollars (\$2,500). Each required payment will be paid to Licensor within thirty (30) days of completion of each milestone listed above.
- (b) Licensee shall pay a milestone fee of \$225,000 for the first sale of TISSUE ENGINEERED PRODUCTS for Human use. This payment will be paid to Licensor within six (6) months of completion of this milestone.

Except as provided herein or as may be required to effectuate the intent of the parties with respect to the AMENDMENT described herein, the AGREEMENT remains in full force and effective and the parties hereby reaffirm and ratify the terms of the AGREEMENT in their entirety.

IN WITNESS WHEREOF, the parties have executed this AMENDMENT to the AGREEMENT by their respective officers hereunto duly authorized, on the day and year written above.

Glycosan BioSystems

University of Utah Research Foundation

By: /s/ William P. Tew

By: /s/ Ray F. Gesteland

Name: William P. Tew, Ph.D.

Name: Ray F. Gesteland

Title: President & CEO

Title: President

Date: May 9, 2006

Date: _____

AMENDMENT TO LICENSE AGREEMENT

This Amendment is made as of February 4, 2008, by and between Glycosan Biosystems, Inc. ("Licensee"), having an address at 675 Arapeen Drive, Suite 302, Salt Lake City, Utah 84108 and the University of Utah Research Foundation, having an address at the Technology Commercialization Office, 615 Arapeen Drive, Suite 310, Salt Lake City, UT 84108 ("Licensor") is effective immediately.

RECITAL

WHEREAS, Licensor and Licensee have previously entered into a license agreement on February 15, 2006, University Control No. 1038 ("Agreement"), with certain inventions, generally characterized as: U-3405 "*In situ* Crosslinkable Synthetic Extracellular Matrices" and U-3656 "Novel Chemical Modifications of Hyaluronan";

WHEREAS, Licensee and Licensor both desire to alter the Agreement in regard to Licensees option to purchase Licensors equity in Glycosan BioSystems, Inc., prior to the second anniversary of the agreement or when the value of Glycosan BioSystems reaches or exceeds one million dollars (\$1,000,000), at a set price of \$100,000 and Licensors option to redeem equity in Glycosan BioSystems, Inc. at a set price of \$150,000, if Licensor still owns equity in Glycoan BioSystems on or after the sixth anniversary of the Agreement

NOW THEREFORE, for and in consideration of the covenants, conditions and undertakings hereinafter set forth, the parties hereby agree as follows:

AMENDMENT

1. Article 6 of the Agreement is hereby deleted in its entirety and replaced with the following:

In consideration of the rights granted to Licensee by Licensor in this Agreement, Licensee will, within twenty one (21) days after execution of this agreement, issue to Licensee fully authorized, fully paid Shares of Stock equaling ten percent (10%) of all outstanding Shares for Glycosan BioSystems, Inc. as of the Effective Date. Thereafter, Licensee shall issue additional Shares to Licensor in order to maintain a ten percent (10%) ownership in Glycosan BioSystems, Inc. until such time as Glycosan BioSystems has reached a valuation of one million dollars (\$1,000,000), as assessed by a third party with potential to acquire Licensee, or the second (2) anniversary of the Effective date. Such Shares will be issued in the name of the Licensor and be subject to acceptance by Licensor of the terms and conditions set forth in Licensee's usual and customary Stock Purchase Agreement, and related agreements governing shareholder rights, containing terms and conditions common to all other investors.

2. Ratification of Agreement. Except as provided herein or as may be required to effectuate the intent of the parties with respect to the amendments described in paragraph 1 hereof, the parties hereby reaffirm and ratify the terms of the Agreement in their entirety.
3. Further Assurances. Each of Licensee and Licensor hereby agrees to execute, deliver, verify, acknowledge, and file any and all documents, instruments, or agreements as shall be necessary or appropriate to reflect the intent of the parties with respect to the amendments of the Agreement described herein.
4. Entire Understanding. This Amendment constitutes the entire understanding between the parties hereto with respect to the subject matter hereof, and any modification of this Amendment shall be in writing and shall be signed by a duly authorized representative of each party.

IN WITNESS WHEREOF, LICENSOR AND LICENSEE have executed this AGREEMENT by their respective officers hereunto duly authorized, on the day and year hereinafter written.

“LICENSEE”
GLYCOSAN BIOSYSTEMS, INC.

“LICENSOR”
UNIVERSITY OF UTAH
RESEARCH FOUNDATION

By: /s/ William P. Tew
(Signature)

By: /s/ John K. Morris
(Signature)

Name: William P. Tew, Ph.D.
(Please Print)

Name: John K. Morris Esq.
(Please Print)

Title: President & CEO

Title: Secretary

Date: Feb. 4, 2008

Date: Feb. 4, 2008

AMENDMENT TO LICENSE AGREEMENT

This Amendment is made as of June 25, 2008, by and between Glycosan Biosystems, Inc. ("Licensee"), having an address at 675 Arapeen Drive, Suite 302, Salt Lake City, Utah 84108 and the University of Utah Research Foundation, having an address at the Technology Commercialization Office, 615 Arapeen Drive, Suite 310, Salt Lake City, UT 84108 ("Licensor") is effective immediately.

RECITAL

WHEREAS, Licensor and Licensee have previously entered into a license agreement on February 15, 2006, University Control No. 1038 ("Agreement"), with certain inventions, generally characterized as: U-3405 "*In situ* Crosslinkable Synthetic Extracellular Matrices" and U-3656 "Novel Chemical Modifications of Hyaluronan";

WHEREAS, Licensee is interested in acquiring rights to improvements of technology contained in the Agreement, these improvements have been recently developed by the inventor, Glenn Prestwich, and have been disclosed in University of Utah invention disclosure No. U-4406 "Fall-Apart Crosslinkers for Cell Recovery From 3D Environments" and have been filed for patent protection through a provisional patent application submitted on May 9, 2008;

WHEREAS Licensor is willing to amend the Agreement to grant Licensee rights to improvements to technology licensed in the Agreement, these improvements are embodied in the United States provisional patent application No. 61/051,698;

NOW THEREFORE, for and in consideration of the covenants, conditions and undertakings hereinafter set forth, the parties hereby agree as follows:

AMENDMENT

1. WITNESSETH section of the Agreement is hereby deleted in its entirety and replaced with the following:

WHEREAS, certain inventions, generally characterized as and assigned University of Utah identification number U-3405, "*In situ* Crosslinkable Synthetic Extracellular Matrices", U-3656, "Novel Chemical Modifications of Hyaluronan" and U-4406 "Fall-Apart Crosslinkers for Cell Recovery From 3D Environments" hereinafter collectively referred to as "the INVENTION", have been made in the course of research at the University of Utah conducted by Glenn Prestwich, Xiao-Zhang Shu, Yi Luo, Kelly Kirker, Jianxing Zhang, Aleksander Skardal and Yanchun Liu and are Covered By Patent Rights (as defined below);

WHEREAS, Licensor desires that the Patent Rights be developed and utilized to the fullest extent so that their benefits can be enjoyed by the general public;

WHEREAS, Licensee wishes to obtain from Licensor a license under certain rights for the commercial development, production, manufacture, use and sale of the Patent Rights, and Licensor is willing to grant such a license upon the terms and conditions hereinafter set forth;

WHEREAS, the Patent Rights were developed in the course of research sponsored in part by the U.S. Government, and as a consequence are subject to overriding obligations of Licensor to the U.S. Government;

NOW THEREFORE, for and in consideration of the covenants, conditions and undertakings hereinafter set forth, the parties hereby agree as follows:

2. EXHIBIT "A" of the Agreement is hereby deleted in its entirety and replaced with the following:

EXHIBIT "A"

Patent Rights

U No.	Matter	Application No. Date of Filing	Title	Inventor(s)
U-3405	21101.0036U1 Provisional	60/390,504 6/21/2002	Disulfide Crosslinked Hyaluronan Hydrogels	Glenn Preswich, Xiao Shu, Yi Luo, Kelly Kirker
U-3405	21101.0036P1 PCT	PCT/US03/15519 5/15/03	Crosslinked Compounds and Methods of Making and Using Thereof	Glenn Preswich, Xiao Shu, Yi Luo, Kelly Kirker
U-3405	21101.0036U2 Nationalized, United States	10/519,173 12/20/04	Crosslinked Compounds and Methods of Making and Using Thereof	Glenn Preswich, Xiao Shu, Yi Luo, Kelly Kirker
U-3405	21101.0036CA1 Nationalized, Canada	2,489,712 5/15/03	Crosslinked Compounds and Methods of Making and Using Thereof	Glenn Preswich, Xiao Shu, Yi Luo, Kelly Kirker
U-3405	21101.0036EP1 Nationalized, Europe	03799796.2 5/15/03	Crosslinked Compounds and Methods of Making and Using Thereof	Glenn Preswich, Xiao Shu, Yi Luo, Kelly Kirker
U-3656	21101.0051P1 Provisional	60/526,797 12/4/2003	Modified Macromolecules and Methods of Making and Using Thereof	Glenn Prestwich, Xiao Shu
U-3656	21101.0051U1 PCT	PCT/US04/040726 12/6/2004	Modified Macromolecules and Methods of Making and Using Thereof	Glenn Prestwich, Xiao Shu
U-4406	24U03.1-140 Provisional	61/051,698 05/09/2008	Fall-Apart Composites and Methods of Use Thereof	Glenn Prestwich, Jianxing Zhang, Aleksander Skardal

3. Fees. Licensee shall pay to Licensor a non-refundable amendment/license fee of three thousand dollars (\$3,000) and back patent costs of three thousand dollars (\$3,000), for a total of six thousand dollars (\$6,000), three thousand dollars (\$3,000) of which is deemed earned and immediately payable upon execution of this Amendment and the remaining three thousand dollars (\$3,000) is due six months following the final signature and execution of this Amendment.
4. Ratification of Agreement. Except as provided herein or as may be required to effectuate the intent of the parties with respect to the amendments described in paragraph 1 hereof, the parties hereby reaffirm and ratify the terms of the Agreement in their entirety.
5. Further Assurances. Each of Licensee and Licensor hereby agrees to execute, deliver, verify, acknowledge, and file any and all documents, instruments, or agreements as shall be necessary or appropriate to reflect the intent of the parties with respect to the amendments of the Agreement described herein.
6. Entire Understanding. This Amendment constitutes the entire understanding between the parties hereto with respect to the subject matter hereof, and any modification of this Amendment shall be in writing and shall be signed by a duly authorized representative of each party.

IN WITNESS WHEREOF, LICENSOR AND LICENSEE have executed this AGREEMENT by their respective officers hereunto duly authorized, on the day and year hereinafter written.

“LICENSEE”
GLYCOSAN BIOSYSTEMS, INC.

By: /s/ William P. Tew
(Signature)

Name: William P. Tew, Ph.D.
(Please Print)

Title: President & CEO

Date: June 25, 2008

“LICENSOR”
UNIVERSITY OF UTAH
RESEARCH FOUNDATION

By: /s/ John K. Morris
(Signature)

Name: John K. Morris Esq.
(Please Print)

Title: Secretary

Date: 7/3/08

AMENDMENT TO LICENSE AGREEMENT

This Amendment is made as of March 6, 2009, by and between Glycosan Biosystems, Inc. ("Licensee"), having an address at 675 Arapeen Drive, Suite 302, Salt Lake City, Utah 84108, and the University of Utah Research Foundation, having an address at the Technology Commercialization Office, 615 Arapeen Drive, Suite 310, Salt Lake City, UT 84108 ("Licensor") is effective immediately.

RECITAL

WHEREAS, Licensor and Licensee have previously entered into a license agreement on February 15, 2006, University Control No. 1038 and amended on May 9, 2006 control No. 1038.A/1051, February 4, 2008 control number 1038.B/1210, and June 25, 2008 control No. 1038.C/1253 ("Agreement"), with certain inventions, generally characterized as: U-3405 "*In situ* Crosslinkable Synthetic Extracellular Matrices", U-3656 "Novel Chemical Modifications of Hyaluronan" and U-4406 "Fall-Apart Crosslinkers for Cell Recovery From 3D Environments";

WHEREAS, Licensee wishes to delay minimum royalties;

WHEREAS Licensor is willing to amend the Agreement to allow Licensee to delay minimum royalties in exchange for an amendment fee;

NOW THEREFORE, for and in consideration of the covenants, conditions and undertakings hereinafter set forth, the parties hereby agree as follows:

AMENDMENT

1. Section 4.4 of the Agreement is hereby deleted in its entirety and replaced with the following:

4.4 Minimum Royalty. Commencing with the second anniversary of the Effective Date Licensee shall be required to pay to Licensor, within sixty (60) days of the following anniversary of the Effective Date a minimum annual royalty as provided below:

YEAR 2	\$7,500
YEAR 3	\$0
YEAR 4	\$0
YEAR 5	\$15,000
YEAR 6	\$22,500
YEAR 7	\$30,000 (and Beyond)

The total payment shall equal the minimum royalty for that year minus the quarterly royalties paid for that year. If the total quarterly royalty payments in any year exceed the minimum annual royalties for that year, then no minimum payments would be due. Licensee shall continue to pay such minimum annual royalty until the end of the term of the last to expire of Licensor's Patent Rights. Licensor shall fully credit each payment of minimum annual royalties against any earned royalty's payable by Licensee with respect to the year in which the minimum annual royalty is made.

2. Issue Fee. Licensee shall pay to Licensor a non-refundable amendment/license fee of seven thousand five hundred (\$7,500) and payable as; \$2,500 deemed earned and payable upon execution of this Amendment, \$2,500 due January 31, 2010, and \$2,500 due January 31, 2011.
3. Ratification of Agreement. Except as provided herein or as may be required to effectuate the intent of the parties with respect to the amendments described in paragraph 1 hereof, the parties hereby reaffirm and ratify the terms of the Agreement in their entirety.
4. Further Assurances. Each of Licensee and Licensor hereby agrees to execute, deliver, verify, acknowledge, and file any and all documents, instruments, or agreements as shall be necessary or appropriate to reflect the intent of the parties with respect to the amendments of the Agreement described herein.
5. Entire Understanding. This Amendment constitutes the entire understanding between the parties hereto with respect to the subject matter hereof, and any modification of this Amendment shall be in writing and shall be signed by a duly authorized representative of each party.

IN WITNESS WHEREOF, LICENSOR AND LICENSEE have executed this AGREEMENT by their respective officers hereunto duly authorized, on the day and year hereinafter written.

“LICENSEE”
GLYCOSAN BIOSYSTEMS

By: /s/ William P. Tew
(Signature)

Name: William Tew
(Please Print)

Title: President & CEO

Date: March 19, 2009

“LICENSOR”
UNIVERSITY OF UTAH
RESEARCH FOUNDATION

By: /s/ Thomas Parks
(Signature)

Name: Thomas Parks
(Please Print)

Title: President

Date: 3.4.09

FIFTH AMENDMENT TO LICENSE AGREEMENT

between
GLYCOSAN BIOSYSTEMS, INC.
and
UNIVERSITY OF UTAH RESEARCH FOUNDATION

This Amendment is made as of December 10, 2009, by and between GLYCOSAN BIOSYSTEMS, INC., having an address at 675 Arapeen Drive, Suite 302, Salt Lake City, Utah 84108, ("Licensee"), and the University of Utah Research Foundation, having an address at the Technology Commercialization Office, 615 Arapeen Drive, Suite 310, Salt Lake City, UT 84108 ("Licensor"), and is effective as of the date first written above.

RECITAL

WHEREAS, Licensor and Licensee have previously entered into a license agreement on February 15, 2006, University Control No. 1038 and amended on May 9, 2006 control No. 1038.A/1051, February 4, 2008 control number 1038.B/1210, June 25, 2008 control No. 1038.C/1253 and 1038.D/1333 ("Agreement"), for certain inventions, generally characterized as: U-3405 "*In situ* Crosslinkable Synthetic Extracellular Matrices", and U-3656 "Novel Chemical Modifications of Hyaluronan" (for purposes of this Amendment, hereinafter "Invention");

WHEREAS, Licensee desires to amend the Agreement to expand the Field of Use for specific patent applications, U-3405, European application 3799796.2, Canadian application 2,489,712 and U-3656, US application 10/581,571, European application 4813101.5, Canadian application 2,549,295, Australian application 2004297231, Japanese application 2006542843;

WHEREAS Licensor is willing to amend the Agreement to expand the Field of Use for the patent applications listed above;

NOW THEREFORE, for and in consideration of the covenants, conditions and undertakings hereinafter set forth, the parties hereby agree as follows:

AMENDMENT

1. Issue Fee. Licensee shall pay to Licensor a non-refundable amendment/license fee of Ten Thousand Dollars (\$10,000) deemed payable in two payments of five thousand dollars (\$5,000), six (6) months and twelve (12) months following execution of this Amendment.
2. Due Diligence. Licensee shall perform the following due diligence:
 - a. Licensee shall secure additional funding which shall be no less than two million dollars (\$2,000,000) on or before the first anniversary of this Amendment.
 - b. Licensee shall initiate safety and toxicology studies of a Licensed Product on or before the first anniversary of this Amendment.
 - c. Licensee shall engage a Notified Body for a CE Mark in the European Union or submit an IND to the FDA on or before the second anniversary of this Amendment.
 - d. Licensee shall initiate a clinical trial utilizing Licensed Product on or before the third anniversary of this Amendment.

3. Section 1.6 of the Agreement is hereby deleted in its entirety and replaced with the following:

Field of Use shall mean exclusive use all of PATENT RIGHTS, excluding animal therapeutics and animal health, in all countries and territories identified in Exhibit A except that:

within the United States only, **“Field of Use”** shall mean exclusive use all of Patent Rights, excluding human and animal therapeutics, animal health, medical devices and pharmaceutical uses and application. Including but not limited to uses in cosmetics, uses in topical delivery of compounds which are not FDA-regulated therapeutic agents, reagents and platforms for in vitro cell and tissue culture, platforms and services for in vitro drug toxicology and efficacy testing, materials for preserving or extending the useful life of human organs and tissues, in vivo xenograft models using human tissues, and any other uses not specifically excluded and,

within the United States only, **“Field of Use”** shall also mean co-exclusive use of PATENT RIGHTS to products and methods in which living tissue or cells are incorporated outside the body into a polymer platform at a facility other than the point-of-care facility, and the resulting hybrid device is then subsequently implanted in humans for therapeutic use (“TISSUE ENGINEERED PRODUCTS”). These co-exclusive rights shall be shared with no more than one other licensee and include Sublicensing rights consistent with the AGREEMENT.

4. Exhibit A of the Agreement is hereby deleted in its entirety and replaced with the new Exhibit A attached hereto:
5. Ratification of Agreement. Except as provided herein or as may be required to effectuate the intent of the parties with respect to the amendments described in paragraph 1 hereof, the parties hereby reaffirm and ratify the terms of the Agreement in their entirety.
6. Further Assurances. Each of Licensee and Licensor hereby agrees to execute, deliver, verify, acknowledge, and file any and all documents, instruments, or agreements as shall be necessary or appropriate to reflect the intent of the parties with respect to the amendments of the Agreement described herein.
7. Entire Understanding. This Amendment constitutes the entire understanding between the parties hereto with respect to the subject matter hereof, and any modification of this Amendment shall be in writing and shall be signed by a duly authorized representative of each party.

IN WITNESS WHEREOF, LICENSOR AND LICENSEE have executed this AGREEMENT by their respective officers hereunto duly authorized, on the day and year hereinafter written.

“LICENSEE”
GLYCOSAN BIOSYSTEMS, INC.

By: /s/ William P. Tew
(Signature)

Name: William P. Tew, PhD

Title: President & CEO

Date: Dec. 22, 2009

“LICENSOR”
UNIVERSITY OF UTAH
RESEARCH FOUNDATION

By: /s/ Thomas N. Parks
(Signature)

Name: Thomas N. Parks

Title: President

Date: 12.18.09

EXHIBIT "A"

Patent Rights

University No.	Country/Territory	Application No.	Title	Inventor(s)
U-3405	United States	12/234,445 12/244,135	Crosslinked Compounds and Methods of Making and Using Thereof	Glenn Preswich, Xiao Shu, Yi Luo, Kelly Kirker
U-3405	European Union	3799796.2	Crosslinked Compounds and Methods of Making and Using Thereof	Glenn Preswich, Xiao Shu, Yi Luo, Kelly Kirker
U-3405	Canada	2,489,712	Crosslinked Compounds and Methods of Making and Using Thereof	Glenn Preswich, Xiao Shu, Yi Luo, Kelly Kirker
U-3656	United States	10/581,571	Modified Macromolecules and Methods of Making and Using Thereof	Glenn Preswich, Xiao Shu,
U-3656	European Union	4813101.5	Modified Macromolecules and Methods of Making and Using Thereof	Glenn Preswich, Xiao Shu,
U-3656	Canada	2,549,295	Modified Macromolecules and Methods of Making and Using Thereof	Glenn Preswich, Xiao Shu,
U-3656	Australia	2004297231	Modified Macromolecules and Methods of Making and Using Thereof	Glenn Prestwich, Xiao Shu
U-3656	Japan	2006542843	Modified Macromolecules and Methods of Making and Using Thereof	Glenn Prestwich, Xiao Shu

SIXTH AMENDMENT TO LICENSE AGREEMENT

between
GLYCOSAN BIOSYSTEMS, INC.
and
UNIVERSITY OF UTAH RESEARCH FOUNDATION

This Amendment is made as of September 23, 2010, by and between GLYCOSAN BIOSYSTEMS, INC., having an address at 675 Arapeen Drive, Suite 302, Salt Lake City, Utah 84108, ("Licensee"), and the University of Utah Research Foundation, having an address at the Technology Commercialization Office, 615 Arapeen Drive, Suite 310, Salt Lake City, UT 84108 ("Licensor"), and is effective as of the date first written above.

RECITAL

WHEREAS, Licensor and Licensee have previously entered into a license agreement on February 15, 2006, University Control No. 1038 and amended on May 9, 2006 control No. 1038.A/1051, February 4, 2008 control number 1038.B/1210, June 25, 2008 control No. 1038.C/1253, March 19, 2008 1038.D/1333 and December 22, 2090 control number 1038.E/1405 ("Agreement"), for certain inventions, generally characterized as: U-3405 "In situ Crosslinkable Synthetic Extracellular Matrices", and U-3656 "Novel Chemical Modifications of Hyaluronan" (for purposes of this Amendment, hereinafter "Invention");

WHEREAS, Licensee desires to amend the Agreement to alter due diligence items, required in the 5th amendment, December 22, 2090 control number 1038.E/1405, to acknowledge Licensees funding accomplishments, the difficult funding environment to delay by one year the initiation of clinical trials;

WHEREAS Licensor is willing to amend the Agreement to alter the due diligence items applications listed above;

NOW THEREFORE, for and in consideration of the covenants, conditions and undertakings hereinafter set forth, the parties hereby agree as follows:

AMENDMENT

1. Due Diligence. Due Diligence section in amendment 5 control number is hereby deleted in its entirety and replaced with the following:
 - a. Licensee shall secure funding consisting of investment and grants which shall be no less than two million dollars (\$2,000,000) on or before January 1, 2011.
 - b. Licensee shall initiate safety and toxicology studies of a Licensed Product on or before the first anniversary of this Amendment.
 - c. Licensee shall engage a Notified Body for a CE Mark in the European Union or submit an IND to the FDA on or before the second anniversary of this Amendment.
 - d. Licensee shall initiate a clinical trial utilizing Licensed Product or obtain regulatory approval for commercial sale on or before January 1, 2014.
2. Section 1.6 of the Agreement is hereby deleted in its entirety and replaced with the following:

Field of Use” shall mean exclusive use all of PATENT RIGHTS, excluding animal therapeutics and animal health, in all countries and territories identified in Exhibit A except that:

within the United States only, **“Field of Use”** shall mean exclusive of use all of Patent Rights, excluding human and animal therapeutics, animal health, in vivo medical devices and pharmaceutical uses and applications. Including but not limited to in vitro medical devices, uses in cosmetics, uses in topical delivery of compounds which are not FDA-regulated therapeutic agents, reagents and platforms for in vitro cell and tissue culture, including such reagents and platforms that are medical devices, excluding in vivo medical devices, platforms and services for in vitro drug toxicology and efficacy testing, materials for preserving or extending the useful life of human organs and tissues, including such materials that are medical devices, excluding in vivo medical devices, in vivo xenograft models using human tissues, and any other uses not specifically excluded and,

within the United States only, **“Field of Use”** shall also mean co-exclusive use of PATENT RIGHTS to products and methods in which living tissue or cells are incorporated outside the body into a polymer platform at a facility other than the point-of-care facility, and the resulting hybrid device is then subsequently implanted in humans for therapeutic use (“TISSUE ENGINEERED PRODUCTS”). These co-exclusive rights shall be shared with no more that one other licensee and include Sublicensing rights consistent with the AGREEMENT.

3. Ratification of Agreement. Except as provided herein or as may be required to effectuate the intent of the parties with respect to the amendments described in paragraph 1 hereof, the parties hereby reaffirm and ratify the terms of the Agreement in their entirety.
4. Further Assurances. Each of Licensee and Licensor hereby agrees to execute, deliver, verify, acknowledge, and file any and all documents, instruments, or agreements as shall be necessary or appropriate to reflect the intent of the parties with respect to the amendments of the Agreement described herein.
5. Entire Understanding. This Amendment constitutes the entire understanding between the parties hereto with respect to the subject matter hereof, and any modification of this Amendment shall be in writing and shall be signed by a duly authorized representative of each party.

IN WITNESS WHEREOF, LICENSOR AND LICENSEE have executed this AGREEMENT by their respective officers hereunto duly authorized, on the day and year hereinafter written.

“LICENSEE”
GLYCOSAN BIOSYSTEMS, INC.

By: /s/ William P. Tew
(Signature)

Name: William P. Tew, PhD

Title: President & CEO

Date: Sept. 23, 2010

“LICENSOR”
UNIVERSITY OF UTAH RESEARCH
FOUNDATION

By: /s/ Thomas N. Parks
(Signature)

Name: Thomas N. Parks

Title: President

Date: 9.22.10

SEVENTH AMENDMENT TO LICENSE AGREEMENT

between
GLYCOSAN BIOSYSTEMS, INC.
and
UNIVERSITY OF UTAH RESEARCH FOUNDATION

This Amendment is made as of February 7, 2011, by and between GLYCOSAN BIOSYSTEMS, INC., having an address at 675 Arapeen Drive, Suite 302, Salt Lake City, Utah 84108, ("Licensee"), and the University of Utah Research Foundation, having an address at the Technology Commercialization Office, 615 Arapeen Drive, Suite 310, Salt Lake City, UT 84108 ("Licensor"), and is effective as of the date first written above.

RECITAL

WHEREAS, Licensor and Licensee have previously entered into a license agreement on February 15, 2006 ("License Agreement"), University Control No. 1038 and amended on May 9, 2006 control No. 1038.A/1051, February 4, 2008 control number 1038.B/1210, June 25, 2008 control No. 1038.C/1253, March 19, 2008 1038.D/1333 and December 22, 2009 control number 1038.E/1405 ("Agreement"), for certain inventions, generally characterized as: U-3405 "*In situ* Crosslinkable Synthetic Extracellular Matrices", and U-3656 "Novel Chemical Modifications of Hyaluronan" (for purposes of this Amendment, hereinafter "Invention");

WHEREAS, upon successful completion of a merger between Glycosan BioSystems and OrthoCyte, a wholly owned subsidiary of BioTime, Inc., the Licensee desires to assign the License Agreement as amended to BioTime, Inc. and to amend the License Agreement as described below;

WHEREAS Licensor is willing, upon successful completion of the merger, to assign the License Agreement as amended to BioTime, Inc. and further amend the License Agreement as described below;

NOW THEREFORE, for and in consideration of the covenants, conditions and undertakings hereinafter set forth, the parties hereby agree that upon the successful completion of the merger between the Licensee and OrthoCyte the following Amendment shall become effective:

AMENDMENT

1. Due Diligence. Due diligence section in the 6th Amendment dated September 22, 2010 is hereby deleted in its entirety and replaced with the following:
 - a. Within 90 days of completing the merger between Glycosan and Orthocyte, Licensee shall submit to the University's Technology Commercialization Office a licensed product development plan and shall use commercially reasonable efforts to execute such plan.

2. Section 1. of the 4th Amendment dated March 6, 2009_ is hereby deleted in its entirety and replaced with the following:

4.4 Minimum Royalty. Commencing with the second anniversary of the Effective Date (February 15, 2006) Licensee shall pay to Licensor, within sixty (60) days of the following anniversary of the Effective Date, a minimum annual royalty as listed below:

YEAR 2 (2008)	\$7,500
YEAR 3 (2009)	\$0
YEAR 4 (2010)	\$0
YEAR 5 (2011)	\$0
YEAR 6 (2012)	\$0
YEAR 7 (2013)	\$15,000
YEAR 8 (2014)	\$22,500
YEAR 9 (2015)	\$30,000 (and Beyond)

The total payment shall equal the minimum royalty for that year minus the quarterly royalties paid for that year. If the total quarterly royalty payments in any year exceed the minimum annual royalty for that year, then no minimum royalty payments would be due.

Licensee shall continue to pay such minimum annual royalty until the end of the term of the last to expire of Licensor's patent rights. Licensor shall fully credit each payment of minimum annual royalties against any earned royalties payable by Licensee with respect to the year in which the minimum annual royalty is made.

3. Assignability. For the merger between Glycosan and Orthocyte only, the Licensor hereby waives the payment of a non-refundable assignment fee as set forth in Article 19, Assignability of the License Agreement, and assigns the License Agreement to BioTime. Furthermore, Article 19 or the License Agreement is replaced in its entirety with the following:

“This Agreement is not assignable or otherwise transferable (including by operation of law, merger, or other business combination) by Licensee without the prior written consent of Licensor, such consent however to not be unreasonably withheld. The failure of Licensee to comply with the terms of this paragraph shall be grounds for termination of the Agreement by Licensor under Article 12. In the event that written consent is provided by Licensor, Licensee will pay a non-refundable fee of thirty thousand dollars (\$30,000) if the total transaction value (including cash, in-kind, equity physical assets and other items of value) is less than twenty five million dollars (\$25 million), and ninety thousand dollars (\$90,000) if the total transaction value exceeds twenty five million dollars (\$25 million) upon the consummation of the assignment or transfer.”

4. Fees. Within 90 days of the closing of the merger between Glycosan and Orthocyte, the Licensee shall deliver to Licensor a non-refundable amendment/assignment fee consisting of \$30,000 in the merger consideration received by Glycosan (BioTime shares and warrants) as set forth in the Merger Agreement between Glycosan and OrthoCyte. Pursuant to the terms of the Merger Agreement, the value of the BioTime stock will be the 10 day trailing average of the BioTime stock price as listed on Nasdaq on the day preceding the execution of the Merger Agreement and the value of the BioTime warrants will be determined by Black-Sholes calculation of the warrant value on the day preceding execution of the Merger Agreement. Licensee shall also submit, with the assignment fee, a certified capitalization table for Glycosan at the time of the merger indicating BioTime shares and warrants received for Glycosan shares.

5. Ratification of Agreement. Except as provided herein or as may be required to effectuate the intent of the parties with respect to the amendments described in paragraphs 1, 2, and 3 hereof, the parties hereby reaffirm and ratify the terms of the Agreement in their entirety.
6. Further Assurances. Each of Licensee and Licensor hereby agrees to execute, deliver, verify, acknowledge, and file any and all documents, instruments, or agreements as shall be necessary or appropriate to reflect the intent of the parties with respect to the amendments of the Agreement described herein.
7. Entire Understanding. This Amendment constitutes the entire understanding between the parties hereto with respect to the subject matter hereof, and any modification of this Amendment shall be in writing and shall be signed by a duly authorized representative of each party.

IN WITNESS WHEREOF, LICENSOR AND LICENSEE have executed this AGREEMENT by their respective officers hereunto duly authorized, on the day and year hereinafter written.

“LICENSEE”
GLYCOSAN BIOSYSTEMS, INC.

By: /s/ William P. Tew
(Signature)

Name: William P. Tew, PhD

Title: President & CEO

Date: Feb. 10, 2010

“LICENSOR”
UNIVERSITY OF UTAH RESEARCH
FOUNDATION

By: /s/ Thomas N. Parks
(Signature)

Name: Thomas N. Parks

Title: President

Date: 2.8.11

LIFEMAP SCIENCES, INC.

2011 Stock Option Plan

1. Purpose and Eligibility

The purpose of this 2011 Stock Option Plan (the "Plan") of LIFEMAP SCIENCES, INC. (the "Company") is to provide stock options and other equity interests in the Company (each an "Award") to selected key officers, directors, employees, consultants, independent contractors, professionals, advisors, scientific advisory board members, and other individuals whose efforts may aid the Company or its Affiliates, all of whom are eligible to receive Awards under the Plan. Any person to whom an Award has been granted under the Plan is called a "Participant." Additional definitions are contained in Section 8.

2. Administration

a. Administration by Board of Directors. The Plan will be administered by the Board of Directors of the Company (the "Board"). The Board, in its sole discretion, shall have the authority to grant and amend Awards, to adopt, amend and repeal rules relating to the Plan and to interpret and correct the provisions of the Plan and any Award. All decisions by the Board shall be final and binding on all interested persons. Neither the Company nor any member of the Board shall be liable for any action or determination relating to the Plan.

b. Appointment of Committees. To the extent permitted by applicable law, the Board may delegate any or all of its powers under the Plan to one or more committees or subcommittees of the Board (a "Committee"). All references in the Plan to the "Board" shall mean such Committee or the Board.

3. Stock Available for Awards

a. Number of Shares. Subject to adjustment under Section 3(c), the aggregate number of shares of Common Stock of the Company (the "Common Stock") that may be issued pursuant to the Plan is 8,000,000 shares. If any Award expires, or is terminated, surrendered or forfeited, in whole or in part, the unissued Common Stock covered by such Award shall again be available for the grant of Awards under the Plan. If shares of Common Stock issued pursuant to the Plan are repurchased by, or are surrendered or forfeited to, the Company at no more than cost, such shares of Common Stock shall again be available for the grant of Awards under the Plan; *provided, however*, that the cumulative number of such shares that may be so reissued under the Plan will not exceed 4,000,000. Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares.

b. Adjustment to Common Stock. In the event of any stock split, stock dividend, extraordinary cash dividend, recapitalization, reorganization, merger, consolidation, combination, exchange of shares, liquidation, spin-off, split-up, or other similar change in capitalization or event, (i) the number and class of securities available for Awards under the Plan and the per-Participant share limit, (ii) the number and class of securities, vesting schedule and exercise price per share subject to each outstanding Option, (iii) the repurchase price per security subject to repurchase, and (iv) the terms of each other outstanding stock-based Award shall be adjusted by the Company (or substituted Awards may be made) to the extent the Board shall determine, in good faith, that such an adjustment (or substitution) is appropriate. If Section 7(e)(i) applies for any event, this Section 3(b) shall not be applicable.

4. Stock Options

a. General. The Board may grant options to purchase Common Stock (each, an "Option") and determine the number of shares of Common Stock to be covered by each Option, the exercise price of each Option and the conditions and limitations applicable to the exercise of each Option and the Common Stock issued upon the exercise of each Option, including vesting provisions, repurchase provisions and restrictions relating to applicable federal or state securities laws, as it considers advisable.

b. Incentive Stock Options. An Option that the Board intends to be an "incentive stock option" as defined in Section 422 of the Code (an "Incentive Stock Option") shall be granted only to employees of the Company and shall be subject to and shall be construed consistently with the requirements of Section 422 of the Code. The Board and the Company shall have no liability if an Option or any part thereof that is intended to be an Incentive Stock Option does not qualify as such. An Option or any part thereof that does not qualify as an Incentive Stock Option is referred to herein as a "Non-Qualified Stock Option."

c. Exercise Price. The Board shall establish the exercise price (or determine the method by which the exercise price shall be determined) at the time each Option is granted and specify it in the applicable option agreement.

d. Duration of Options. Each Option shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable option agreement.

e. Exercise of Option. Options may be exercised only by delivery to the Company of a written notice of exercise signed by the proper person together with payment in full as specified in Section 4(f) for the number of shares for which the Option is exercised.

f. Payment Upon Exercise. Common Stock purchased upon the exercise of an Option shall be paid for by one or any combination of the following forms of payment, as determined by the Board in the exercise of its discretion, and specified in the applicable option agreement:

(i) by check payable to the order of the Company;

(ii) except as otherwise explicitly provided in the applicable option agreement, and only if the Common Stock is then publicly traded, delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the exercise price, or delivery by the Participant to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Company cash or a check sufficient to pay the exercise price; or

(iii) to the extent explicitly provided in the applicable option agreement, by (A) delivery of shares of Common Stock owned by the Participant valued at fair market value (as determined by the Board or as determined pursuant to the applicable option agreement), (B) net exercise of the option pursuant to which the Participant agrees to surrender a sufficient number of shares obtained through exercise of the option, valued at fair market value (as determined by the Board or as determined by the applicable option agreement) to satisfy the exercise price, or (C) payment of such other lawful consideration as the Board may determine.

5. Restricted Stock

a. Grants. The Board may grant Awards entitling recipients to acquire shares of Common Stock, subject to (i) delivery to the Company by the Participant of cash or other lawful consideration in an amount at least equal to the par value of the shares purchased, and (ii) the right of the Company to repurchase all or part of such shares at their issue price or other stated or formula price from the Participant in the event that conditions specified by the Board in the applicable Award are not satisfied prior to the end of the applicable restriction period or periods established by the Board for such Award (each, a "Restricted Stock Award").

b. Terms and Conditions. The Board shall determine the terms and conditions of any such Restricted Stock Award. Any stock certificates issued in respect of a Restricted Stock Award shall be registered in the name of the Participant and, unless otherwise determined by the Board, deposited by the Participant, together with a stock power endorsed in blank, with the Company (or its designee). After the expiration of the applicable restriction periods, the Company (or such designee) shall deliver the certificates no longer subject to such restrictions to the Participant or, if the Participant has died, to the beneficiary designated by a Participant, in a manner determined by the Board, to receive amounts due or exercise rights of the Participant in the event of the Participant's death (the "Designated Beneficiary"). In the absence of an effective designation by a Participant, Designated Beneficiary shall mean the Participant's estate.

6. Other Stock-Based Awards

The Board shall have the right to grant other Awards based upon the Common Stock having such terms and conditions as the Board may determine, including, without limitation, the grant of shares based upon certain conditions, the grant of securities convertible into Common Stock and the grant of stock appreciation rights, phantom stock awards or stock units.

7. General Provisions Applicable to Awards

a. Transferability of Awards. Except as the Board may otherwise determine or provide in an Award, Awards shall not be sold, assigned, transferred, pledged or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the life of the Participant, shall be exercisable only by the Participant. References to a Participant, to the extent relevant in the context, shall include references to authorized transferees.

b. Documentation. Each Award under the Plan shall be evidenced by a written instrument in such form as the Board shall determine or as executed by an officer of the Company pursuant to authority delegated by the Board. Each Award may contain terms and conditions in addition to those set forth in the Plan *provided that* such terms and conditions do not contravene the provisions of the Plan.

c. Board Discretion. The terms of each type of Award need not be identical, and the Board need not treat Participants uniformly.

d. Termination of Status. The Board shall determine the effect on an Award of the disability, death, retirement, authorized leave of absence or other change in the employment or other status of a Participant and the extent to which, and the period during which, the Participant, or the Participant's legal representative, conservator, guardian or Designated Beneficiary, may exercise rights under the Award.

e. Acquisition of the Company

(i) Consequences of an Acquisition. Upon the consummation of an Acquisition, the Board or the board of directors of the surviving or acquiring entity (as used in this Section 7(e)(i), also the "Board") shall, as to outstanding Awards (on the same basis or on different bases as the Board shall specify), make appropriate provision for the continuation of such Awards by the Company or the assumption of such Awards by the surviving or acquiring entity and by substituting on an equitable basis for the shares then subject to such Awards either (a) the consideration payable with respect to the outstanding shares of Common Stock in connection with the Acquisition, (b) shares of stock of the surviving or acquiring corporation or (c) such other securities or other consideration as the Board deems appropriate, the fair market value of which (as determined by the Board in its sole discretion) shall not materially differ from the fair market value of the shares of Common Stock subject to such Awards immediately preceding the Acquisition. In addition to or in lieu of the foregoing, with respect to outstanding Options, the Board may, on the same basis or on different bases as the Board shall specify, upon written notice to the affected optionees, provide that one or more Options then outstanding must be exercised, in whole or in part, within a specified number of days of the date of such notice, at the end of which period such Options shall terminate, or provide that one or more Options then outstanding, in whole or in part, shall be terminated in exchange for a cash payment equal to the excess of the fair market value (as determined by the Board in its sole discretion) for the shares subject to such Options over the exercise price thereof; *provided, however*, that before terminating any portion of an Option that is not vested or exercisable (other than in exchange for a cash payment), the Board must first accelerate in full the exercisability of the portion that is to be terminated. Unless otherwise determined by the Board (on the same basis or on different bases as the Board shall specify), any repurchase rights or other rights of the Company that relate to an Option or other Award shall continue to apply to consideration, including cash, that has been substituted, assumed or amended for an Option or other Award pursuant to this paragraph. The Company may hold in escrow all or any portion of any such consideration in order to effectuate any continuing restrictions. Notwithstanding the foregoing, the Board retains the authority to do or approve any action affecting the terms of Awards that the Board deems to be in the best interests of the Company.

(ii) Acquisition Defined. An "Acquisition" shall mean: (x) the sale of the Company by merger in which the shareholders of the Company in their capacity as such no longer own a majority of the outstanding equity securities of the Company (or its successor); or (y) any sale of all or substantially all of the assets or capital stock of the Company (other than in a spin-off or similar transaction) or (z) any other acquisition of the business of the Company, as determined by the Board.

(iii) Assumption of Options Upon Certain Events. In connection with a merger or consolidation of an entity with the Company or the acquisition by the Company of property or stock of an entity, the Board may grant Awards under the Plan in substitution for stock and stock-based awards issued by such entity or an affiliate thereof. The substitute Awards shall be granted on such terms and conditions as the Board considers appropriate in the circumstances.

f. Withholding. Each Participant shall pay to the Company, or make provisions satisfactory to the Company for payment of, any taxes required by law to be withheld in connection with Awards to such Participant no later than the date of the event creating the tax liability. The Board may allow Participants to satisfy such tax obligations in whole or in part by transferring shares of Common Stock, including shares retained from the Award creating the tax obligation, valued at their fair market value (as determined by the Board or as determined pursuant to the applicable option agreement). The Company may, to the extent permitted by law, deduct any such tax obligations from any payment of any kind otherwise due to a Participant.

g. Amendment of Awards. The Board may amend, modify or terminate any outstanding Award including, but not limited to, substituting therefor another Award of the same or a different type, changing the date of exercise or realization, and converting an Incentive Stock Option to a Non-Qualified Stock Option, *provided that* the Participant's consent to such action shall be required unless the Board determines that the action, taking into account any related action, would not materially and adversely affect the Participant.

h. Conditions on Delivery of Stock. The Company will not be obligated to deliver any shares of Common Stock pursuant to the Plan or to remove restrictions from shares previously delivered under the Plan until (i) all conditions of the Award have been met or removed to the satisfaction of the Company, (ii) in the opinion of the Company's counsel, all other legal matters in connection with the issuance and delivery of such shares have been satisfied, including any applicable securities laws and any applicable stock exchange or stock market rules and regulations, and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Company may consider appropriate to satisfy the requirements of any applicable laws, rules or regulations.

i. Acceleration. The Board may at any time provide that any Options shall become immediately exercisable in full or in part, that any Restricted Stock Awards shall be free of some or all restrictions, or that any other stock-based Awards may become exercisable in full or in part or free of some or all restrictions or conditions, or otherwise realizable in full or in part, as the case may be, despite the fact that the foregoing actions may (i) cause the application of Sections 280G and 4999 of the Code if a change in control of the Company occurs, or (ii) disqualify all or part of the Option as an Incentive Stock Option. In the event of the acceleration of the exercisability of one or more outstanding Options, including pursuant to paragraph (e)(i), the Board may provide, as a condition of full exercisability of any or all such Options, that the Common Stock or other substituted consideration, including cash, as to which exercisability has been accelerated shall be restricted and subject to forfeiture back to the Company at the option of the Company at the cost thereof upon termination of employment or other relationship, with the timing and other terms of the vesting of such restricted stock or other consideration being equivalent to the timing and other terms of the superseded exercise schedule of the related Option.

8. Miscellaneous

a. Definitions.

(i) "Company" for purposes of eligibility under the Plan, shall include any present or future corporation which is a parent corporation or a subsidiary corporation with respect to LIFEMAP SCIENCES, INC. within the meaning of Sections 424(e) or (f) of the Code. For purposes of Awards other than Incentive Stock Options, the term "Company" shall include any other business venture in which the Company has a direct or indirect significant interest, as determined by the Board in its sole discretion.

(ii) "Code" means the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder.

(iii) "Employee" for purposes of eligibility under the Plan (but not for purposes of Section 4(b)) shall include a person to whom an offer of employment has been extended by the Company.

b. No Right To Employment or Other Status. No person shall have any claim or right to be granted an Award, and the grant of an Award shall not be construed as giving a Participant the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with a Participant free from any liability or claim under the Plan.

c. No Rights As Stockholder. Subject to the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed with respect to an Award until becoming the record holder thereof.

d. Effective Date and Term of Plan. The Plan shall become effective on the date on which it is adopted by the Board. No Awards shall be granted under the Plan after the completion of ten years from the date on which the Plan was adopted by the Board, but Awards previously granted may extend beyond that date.

e. Amendment of Plan. The Board may amend, suspend or terminate the Plan or any portion thereof at any time.

f. Governing Law. The provisions of the Plan and all Awards made hereunder shall be governed by and interpreted in accordance with the laws of California, without regard to any applicable conflicts of law.

Adopted by the Board of Directors on
March 30, 2011

Approved by the stockholders on
May 4, 2011

INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT made and entered into as of _____, by and between LIFEMAP SCIENCES, INC., a California corporation (the "Company"), and _____, an employee/consultant (the "Employee") of the Company or of a subsidiary of the Company (hereinafter included within the term "Company") within the meaning of Section 425(f) of the Internal Revenue Code of 1986, as amended (the "Code"),

WITNESSETH

WHEREAS, the Company has adopted the LifeMap Sciences, Inc. 2011 Stock Option Plan (the "Plan"), administered by the Company's Board of Directors (the "Board") or, in the discretion of the Board, by a committee (the "Committee"), providing for the granting to its employees or other individuals, stock options to purchase the Company's common stock, no par value; and

WHEREAS, the Plan provides for the grant of certain options which are intended to be incentive stock options ("incentive stock options" or "options") within the meaning of Section 422(b) of the Code; and

WHEREAS, the Employee is an officer or key employee/consultant who is in a position to make an important contribution to the long-term performance of the Company;

NOW, THEREFORE, in consideration of the foregoing and of the mutual covenants hereinafter set forth and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties agree as follows:

1. Grant. The Company hereby grants to the Employee an incentive stock option to purchase _____ shares of common stock, no par value (the "Shares"), at the price set forth in Section 2, on the terms and conditions hereinafter stated and subject to any limitations contained in the Plan.

2. Exercise Price. The purchase price per Share is _____ (\$____) which was the fair market value of the Shares as determined by the Board immediately prior to the grant.

3. Vesting. Unless otherwise terminated as provided by this Agreement, this option will vest (and thereby become exercisable) as follows: _____ of the number of Shares will vest at the end of each full month of employment. Vesting will depend on Employee's continued employment with the Company through the applicable vesting date. The unvested portion of the Option shall not be exercisable.

4. **Expiration.** The vested portion of the options shall expire at 5:00 p.m. California time on the seventh anniversary of the date of grant.

5. **Adjustments in Shares and Purchase Price.**

(a) The number of Shares subject hereto and the purchase price per Share thereof shall adjusted by the Board or Committee as provided in Section 3(b) of the Plan for any increase or decrease in the number of issued and outstanding shares of common stock resulting from a subdivision or consolidation of shares or the payment of a stock dividend, or any other increase or decrease in the number of issued and outstanding shares of common stock effected without receipt of consideration by the Company.

(b) Upon (x) the sale of the Company by merger in which the shareholders of the Company in their capacity as such no longer own a majority of the outstanding equity securities of the Company (or its successor); or (y) any sale of all or substantially all of the assets or capital stock of the Company (other than in a spin-off or similar transaction) or (z) any other acquisition of the business of the Company, as determined by the Board, the provisions of Section 7(e) of the Plan, as it may be amended from time to time, shall apply.

(c) The foregoing adjustments made by the Board or Committee or the board of directors of a successor to the Company shall be final, binding and conclusive.

(d) The grant of this option shall not affect in any way the right of power of the Company to make adjustments, reclassifications, reorganizations or changes of its capital or business structure or to merge or to consolidate or to dissolve, liquidate or sell, or transfer all or any part of its business or assets.

6. **Effect of Termination of Employment.** In the event of termination of the Employee's employment for any reason other than his or her death or disability, this option may not be exercised after three months after the date he or she ceases to be an employee of the Company, and may be exercisable only up to the amount vested on the date of termination.

7. **Effect of Death or Disability.** This option shall be exercisable during the Employee's lifetime only by the Employee and shall be nontransferable by the Employee otherwise than by will or the laws of descent and distribution.

(a) In the event the Employee ceases to be employed by the Company on account of the Employee's disability, this option may not be exercised after one year following cessation of employment due to such disability, and may be exercisable only up to the amount vested under Section 3 on the date of disability. A disability means that an employee is unable to carry out the responsibilities and functions of the position held by the employee by reason of any medically determinable physical or mental impairment.

(b) In the event of the Employee's death while in the employ of the Company, or during the three-month period following termination of employment during which the Employee is permitted to exercise this option pursuant to Section 6 or 7, this option may be exercised by the executor or administrator of the Employee's estate or any person who shall have acquired the option from the Employee by his or her will or the applicable law of descent and distribution, during a period of one year after Employee's death with respect to the number of Shares for which the deceased Employee would have been entitled to exercise at the time of his or her death, including the number of Shares that vested upon his death under Section 3, subject to adjustment under Section 5. Any such transferee exercising this option must furnish the Company upon request of the Committee (i) written notice of his or her status as transferee, (ii) evidence satisfactory to the Company to establish the validity of the transfer of the option in compliance with any laws of regulations pertaining to said transfer, and (iii) written acceptance of the terms and conditions of the option as prescribed in this Agreement.

8. How to Exercise Option. This option may be exercised by the person then entitled to do so as to any Share which may then be purchased by giving written notice of exercise to the Company, specifying the number of full Shares to be purchased and accompanied by full payment of the purchase price thereof and the amount of any income tax the Company is required by law to withhold by reason of such exercise. The purchase price shall be payable in cash or in shares of Company common stock having a value equal to the exercise price or in a combination of cash and shares of Company common stock.

9. No Rights as Shareholder Prior to Exercise. Neither the Employee nor any person claiming under or through the Employee shall be or have any of the rights or privileges of a stockholder of the Company in respect of any of the Shares issuable upon the exercise of the option until the date of receipt of payment (including any amounts required by income tax withholding requirements) by the Company.

10. Notices. Any notice to be given to the Company under the terms of this Agreement shall be addressed to the Company at its principal executive office, or at such other address as the Company may hereafter designate in writing. Any notice to be given to the Employee shall be addressed to the Employee as the address set forth beneath his or her signature hereto, or at any such other address as the Employee may hereafter designate in writing. Any such notice shall be deemed to have been duly given three (3) days after being addressed as aforesaid and deposited in the United States mail, first class postage prepaid.

11. Restrictions on Transfer. Except as otherwise provided herein, the option herein granted and the rights and privileges conferred hereby shall not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and shall not be subject to sale under execution attachment or similar process upon the rights and privileges conferred hereby. Any transfer, assignment, pledge or other disposal of said option, or of any right or privilege conferred hereby, contrary to the provisions hereof, or any sale under any execution, attachment or similar process upon the rights and privileges conferred hereby, shall immediately be null and void and shall not vest in any purported assignee or transferee any rights or privileges of the optionee, under this Agreement or otherwise with respect to such options. Notwithstanding the preceding two sentences, in conjunction with the exercise of an option, and for the purpose of obtaining financing for such exercise, the option holder may arrange for a securities broker/dealer to exercise an option on the option holder's behalf, to the extent necessary to obtain funds required to pay the exercise price of the option.

12. Successor and Assigns. Subject to the limitations on transferability contained herein, this Agreement shall be binding upon and inure to the benefit of the heirs, legal representatives, successors and assigns of the parties hereto.

13. Additional Restrictions. The rights awarded hereby are subject to the requirement that, if at any time the Board or the Committee shall determine, in its discretion, that the listing, registration or qualification of the Shares subject to such rights upon any securities exchange or under any state or federal law, or the consent or approval of any government regulatory body, is necessary or desirable as a condition of, or in connection with, the granting of such rights or the issuance or purchase of Shares in connection with the exercise of such rights, then such rights may not be exercised in whole or in part unless such listing, registration, qualification, consent or approval shall have been affected or obtained free of any conditions not acceptable to the Board or the Committee. Furthermore, if the Board or Committee determines that amendment to any stock option (including but not limited to the increase in the exercise price) is necessary or desirable in connection with the registration or qualification of any Shares or other securities under the securities or "blue sky" laws of any state, then the Board or Committee shall have the unilateral right to make such changes without the consent of the Employee.

14. Notice of Sale or Other Disposition of Shares. In the event the Employee disposes of any of the Shares that may be acquired hereunder at any time within two years of the date hereof or one year from the date the Shares were acquired, the Employee agrees to notify the Company in writing within ten days of the date of such disposition, of the number of Shares disposed of, the nature of the transaction, and the amount received (if any) upon such disposition. Employee understands that such a disposition may result in imposition of withholding taxes, and agrees to remit to the Company on request any amounts requested to satisfy any withholding tax liability.

15. Terms of Employment. Subject to any employment contract with the Employee, the terms of employment of the Employee shall be determined from time to time by the Company and the Company shall have the right, which is hereby expressly reserved, to terminate the Employee or change the terms of the employment at any time for any reason whatsoever, with or without good cause. The Employee agrees to notify in writing the Corporate Secretary of the Company of the Employee's intention, if any, to terminate Employee's employment within ten days after said intention is formed.

16. Payment of Taxes. Whenever Shares are to be issued to the Employee in satisfaction of the rights conferred hereby, the Company shall have the right to require the Employee to remit to the Company an amount sufficient to satisfy federal, state and local withholding tax requirements prior to the delivery of any certificate or certificates for such Shares.

17. Terms and Conditions of Plan. This Agreement is subject to, and the Company and the Employee agree to be bound by, all of the terms and conditions of the Plan, as the same shall have been amended from time to time in accordance with the terms thereof, provided that no such amendment shall deprive the Employee, without his or her consent, of any of his or her rights hereunder, except as otherwise provided in this Agreement or in the Plan. The Shares acquired hereunder may also be subject to restrictions on transfer and/or rights of repurchase that may be contained in the Bylaws of the Company or in separate agreements with Employee. The Board or the Committee shall have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules. All actions taken and all interpretations and determinations made by the Board or the Committee in good faith shall be final and binding upon Employee, the Company and all other interested persons. No member of the Board or the Committee shall be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Agreement.

18. Severability. In the event that any provision in this Agreement shall be invalid or unenforceable, such provision shall be severable from, and such invalidity or unenforceability shall not be construed to have any effect on the remaining provisions of this Agreement.

19. Governing Law. This Agreement shall be governed by and construed under the laws of the state of California, without regard to conflicts of law provisions.

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

COMPANY:

LifeMap Sciences, Inc.

By _____

Title

By _____

Title Chief Financial Officer

EMPLOYEE:

(Signature)

(Please Print Name)

I, Michael D. West, certify that:

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

Date: May 3, 2011

/s/ Michael D. West

Michael D. West

Chief Executive Officer

CERTIFICATIONS

Exhibit 31

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:
 - (e) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which the periodic reports are being prepared;
 - (f) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles
 - (g) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (h) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - (c) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (d) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 3, 2011

/s/ Robert W. Peabody

Robert W. Peabody
Chief Financial Officer

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

In connection with the Quarterly Report on Form 10-Q of BioTime, Inc. (the "Company") for the quarter ended March 31, 2011 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Michael D. West, Chief Executive Officer, and Robert W. Peabody, Chief Financial Officer of the Company, certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: May 3, 2011

/s/ Michael D. West

Michael D. West
Chief Executive Officer

/s/ Robert W. Peabody

Robert W. Peabody
Chief Financial Officer
