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December 17, 2010

Mr. Jim B. Rosenberg Senior Assistant Chief Accountant Securities and Exchange Commission 100 F Street, NE Washington, DC 20549

RE: BioTime, Inc. Form 10-K for the Fiscal Year Ended December 31, 2009 Definitive Proxy Statement Filed April 30, 2010 File No. 001-12830

Dear Mr. Rosenberg:

We are counsel to BioTime, Inc. This letter is in response to your comment letter dated December 8, 2010 concerning the above-referenced Form 10-K and Proxy Statement. The number of each paragraph below corresponds to the number of each comment in your comment letter.

Comment 1

BioTime's Form 10-K for the year ended December 31, 2010 will report on the status of research and development being conducted in each of its subsidiaries. As we explained in our letter of November 15, 2010, these research programs were in very early stages of planning, defining project goals, financing, and the initiation of research during 2009. Accordingly, the discussion in our next Form 10-K will explain the current goals and progress made in the various programs. Our MD&A section will include a table summarizing the status of our projects and the amount of research and development expenses incurred during the year. Future filings will present cost information for each of the fiscal years ending on or after December 31, 2010 for which financial statements are provided.

Per your request a model of the kind of disclosure that BioTime expects to include in its next Form 10-K is enclosed with this letter. Please bear in mind that the attached model is not complete or in final form, and is subject to revision for inclusion in the 10-K.

Comment 2

BioTime is not applying the technical guidance in ASC 730 for the accounting treatment of the deferred license fees, as they do not believe that their acquisition of intellectual property falls within the scope of that guidance. According to ASC 730-10-15-3, the guidance applies to the following transactions and activities: "Those *activities* (emphasis added) aimed at developing or significantly improving a product or service (referred to as product) or a process or technique (referred to as process) whether the product or process is intended for sale or use. A process may be a system whose output is to be sold, leased, or otherwise marketed to others. A process also may be used internally as a part of a manufacturing activities" such as internal research and development by BioTime, but rather account for license payments made to acquire the right to use existing, patented or patent pending technology, and in certain cases rights to stem cell lines, developed by third parties. The cost of BioTime's research and development activities, using the acquired technology, to produce new product lines has been correctly expensed, and will continue to be expensed, in the periods incurred.

It should also be noted that BioTime <u>does not own any of the technology</u> for the development of the product lines, which much of the language in ASC 730 revolves around. Furthermore, the license agreements stipulate that there will be royalties paid to the licensor(s) once the eventual sales of the said product lines commence. BioTime believes that the money paid for the licenses was properly capitalized as of December 31, 2009 and 2008, and that those amounts should then amortized as deferred fees over their respective economic lives once the product lines become available for sale to the general public. BioTime also reviews its assets annually for impairment.

We would also like to point out that expensing the cost paid to acquire patent licenses would result in a disparity of accounting treatment for intangible property that BioTime acquires depending on whether BioTime acquires the technology rights through the acquisition of a business or through a separate license agreement. Assets, including intangible property, acquired as part of a business combination must be capitalized. Disparate accounting treatment, based solely on the form of the acquisition transaction, makes no sense, especially when business acquisitions of research and development companies are completed primarily or even solely for the purpose of acquiring intellectual property. Also, expensing the cost of acquiring such assets is in conflict with the practices under International Financial Reporting Standards.

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Please direct all correspondence and communications with respect to the foregoing to the undersigned.

Very truly yours,

s/Richard S. Soroko

Richard S. Soroko

PROPOSED MODEL DISCLOSURE FOR 2010 FORM 10-K

Model Disclosure for Inclusion in Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations

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

We entered the fields of stem cell research and regenerative medicine during October 2008. From that time through 2009, our activities in those fields included acquiring rights to market stem cell lines, pursuing patents, planning future products and research programs, applying for research grants, identifying the characteristics of various acquired progenitor and stem cell lines, negotiating a product distribution agreement, organizing new subsidiaries to address particular fields of product development, and planning and launching our first product development programs.

The following table summarizes the most significant achievements in our primary research and development programs in stem cell research and regenerative medicine, and the amount we spent on those programs during the last fiscal year.

Company	Program	Status	2010 R & D Expenses
Embryome Sciences ⁽¹⁾	ACTCellerate cell lines/ growth media/reagent kits for stem cell research	Embryome Sciences now offers nearly 300 products for stem cell research, including ACTCellerate [™] hEPCs, cell line optimal growth media, and reagent cell differentiation kits. Embryome Sciences plans to add additional cell lines, growth media, and differentiation kits as it characterizes new hEPCs.	\$
Embryome Sciences ⁽¹⁾	CIRM-funded research project will addresses 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.	\$ (funded by CIRM grant)

Company	Program	Status	2010 R & D Expenses
		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 these 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 these 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.	
OncoCyte ⁽²⁾	Vascular endothelial cells that can be engineered to deliver a toxic payload to the developing blood vessels of a tumor	Developed a derivation protocol that can produce populations of endothelial-type cells with purity and efficiencies that exceed any published data.	\$
		monitor and measure vascular endothelial cell differentiation process.	

	Company	Program	Status	2010 R & D Expenses
			Initiated <i>in vivo</i> experiments monitoring incorporation of endothelial cells into developing mouse vasculature and into the developing vasculature of human tumor xenografts.	
			Completed initial development of a toxic payload trangene system which includes a pro-drug converting enzyme (TK) and paired pro-drug (gangcyclovir)	
OrthoCyte ⁽³⁾		Cartilage Repair Using Embryonic Progenitor Cells	Identified several cell lines that displayed molecular markers consistent with the production of human cartilage.	\$
			Confirmed chondrogenic potential by directly measuring cartilage production from these lines.	
			Demonstrated that these cell lines can be combined with commonly used support matrices to formulate a combination product for treating cartilage deficits.	
Cell Cure ⁽⁴⁾		OpRegen™ for treatment of age related macular degeneration	Conducted animal model studies to establish proof of concept.	\$
			Developed directed differentiation as efficient method for short culture period to produce a supply of RPE cells.	
			Cell Cure granted Teva Pharmaceutical Industries, Ltd. an option to complete clinical development of, and to manufacture, distribute, and sell OpRegen [™] and OpRegen-Plus [™]	

(1) Embryome Sciences was organized during December 2007 and acquired its ACTCellerate[™] technology during July 2008.

(2) OncoCyte was organized during October 2009 and received \$4,000,000 of initial capital.

(3) OrthoCyte was organized during June 2010.

(4) We acquired an interest in Cell Cure during 2010. Cell Cure received \$7,100,000 of additional equity financing during October 2010.

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 technology or stem cell products, or that any technology or products that they may develop will be proven safe and effective in 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, and assemble a team of physicians and statisticians for the trials. Clinical trials will be costly to undertake and will take years to complete. See our discussion of the risks inherent in our business and the impact of government regulation on our business in the *Risk Factors* section and *Business* section of this report.

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

Research and Operating Expenses

The following table shows the approximate percentages of our total research and development expenses of \$______ allocated to our primary research and development projects during the year ended December 31, 2010:

Project

Percent ACTCellerate hPECs and related research products CIRM sponsored ACTCellerate technology OncoCyte cancer therapy OrthoCyte orthopedic therapy Cell Cure OpRegen™, OpRegen-Plus™, and neurological disease therapies Other

100%