ADVANCED CELL TECHNOLOGY, INC.
Form 10-K/A
August 05, 2009

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K/A

(Mark One)

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

For the fiscal year ended December 31, 2008

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 0-50295

ADVANCED CELL TECHNOLOGY, INC.
(Exact name of registrant as specified in its charter)

Delaware	87-0656515
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(I.R.S. EMPLOYER IDENTIFICATION NO.)

381 Plantation Street, Worcester, Massachusetts 01605

(508) 756-1212

(Address and telephone number, including area code, of registrant’s principal executive offices)

Securities registered pursuant to Section 12(b) of the Act:
Common Stock, $0.01 par value per share
(Title of Class)

Securities registered pursuant to Section 12(g) of the Act:
None.
(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ¨ No x

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ¨ No x

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 x No ¨

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 229.405 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 o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. x

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. (Check one):

Large accelerated filer ¨	Accelerated filer ¨
Non-accelerated filer ¨ (Do not check if a smaller reporting company)	Smaller reporting company x

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

The aggregate market value of the registrant's Common Stock held by non-affiliates of the registrant (based upon the closing price of $0.08 for the registrant's Common Stock as of June 30, 2008) was approximately $14.0 million (based on 175,500,837 shares of common stock outstanding on such date). Shares of the registrant's Common Stock held by each executive officer and director and by each entity or person that, to the registrant's knowledge, owned 5% or more of the registrant's outstanding Common Stock as of June 30, 2008 have been excluded in that such persons may be deemed to be affiliates of the registrant. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

The number of outstanding shares of the registrant's Common Stock, $0.01 par value, was 499,905,641 shares as of June 30, 2009.

Explanatory Note: The Company is filing this Amendment to its Annual Report on Form 10-K, for the fiscal year ended December 31, 2008, to file a revised Report of Independent Registered Public Accounting Firm, to correct the date of the original report (another copy of the Company's financial statements, which have not been revised, are included with the report), and to file certain exhibits in Item 15.

ADVANCED CELL TECHNOLOGY, INC.
2008 ANNUAL REPORT ON FORM 10-K/A
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CAUTIONARY STATEMENT RELATING TO THE SAFE HARBOR PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This Annual Report on Form 10-K/A and the information incorporated by reference includes ‘‘forward-looking statements’’ within the meaning of section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. We intend those forward looking-statements to be covered by the safe harbor provisions for forward-looking statements. All statements regarding our expected financial position and operating results, our business strategy, our financing plans and the outcome of any contingencies are forward-looking statements. Any such forward-looking statements are based on current expectations, estimates, and projections about our industry and our business. Words such as ‘‘anticipates,’’ ‘‘expects,’’ ‘‘intends,’’ ‘‘plans,’’ ‘‘believes,’’ ‘‘seeks,’’ ‘‘estimates,’’ or variations and similar expressions are intended to identify such forward-looking statements. Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those stated in or implied by any forward-looking statements.

Part II

Item 8 Financial Statements and Supplementary Data

Report of Independent Registered Public Accounting Firm

To the Board of Directors
Advanced Cell Technology, Inc.
Los Angeles, CA

We have audited the accompanying consolidated balance sheets of Advanced Cell Technology, Inc and subsidiary as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders' deficit and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Advanced Cell Technology Inc. and subsidiary as of December 31, 2008 and 2007, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring net losses from operations, negative cash flows from operations, a substantial stockholders' deficit and its total liabilities exceeds its total assets. This raises substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

We were not engaged to examine management's assessment of the effectiveness of Advanced Cell Technology, Inc. and subsidiary's internal control over financial reporting as of December 31, 2008, included in the accompanying Management's Report on Internal Control over Financial Reporting and, accordingly, we do not express an opinion thereon.

/s/ SingerLewak LLP

Los Angeles, California
July 2, 2009

ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY
CONSOLIDATED BALANCE SHEETS
AS OF DECEMBER 31, 2008 AND 2007

	December 31, 2008	December 31, 2007 (restated)
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 816,904	$ 1,166,116
Accounts receivable	261,504	27,026
Prepaid expenses	32,476	68,416
Deferred royalty fees, current portion	182,198	341,274
Total current assets	1,293,082	1,602,832
Property and equipment, net	400,008	914,504
Investment in joint venture	225,200	-
Deferred royalty fees, less current portion	659,488	1,202,430
Deposits	-	115,192
Deferred issuance costs, net of amortization of $8,666,387 and $3,874,300	-	4,772,087
TOTAL ASSETS	$ 2,577,778	$ 8,607,045
LIABILITIES AND STOCKHOLDERS' DEFICIT		
CURRENT LIABILITIES:		
Accounts payable	$ 8,287,786	$ 5,517,876
Accrued expenses	2,741,591	1,120,781
Accrued default interest	3,717,384	-
Deferred revenue, current portion	834,578	497,374
Advances payable - other	130,000	130,000
2005 Convertible debenture and embedded derivatives, net of discounts of $0 and $600,246	85,997	1,276,871
2006 Convertible debenture and embedded derivatives (fair value $1,993,354 and $3,939,862)	1,993,354	1,625,327
2007 Convertible debenture and embedded derivatives (fair value $7,706,344 and $3,874,026)	7,706,344	1,160,847
February 2008 Convertible debenture and embedded derivatives (fair value $1,757,470 and $0)	1,757,470	-
April 2008 Convertible debenture and embedded derivatives (fair value $4,066,505 and $0)	4,066,505	-
Warrant and option derivatives, current portion	2,655,849	14,574
Deferred joint venture obligations, current portion	167,335	-
Short term capital leases	12,955	31,605
Notes payable, other	468,425	468,425
Total current liabilities	34,625,573	11,843,680
2006 Convertible debenture and embedded derivatives, less current portion (fair value $0 and $3,447,230)	-	1,422,164

2007 Convertible debenture and embedded derivatives, less current portion (fair value $0 and $7,748,052)	-	2,321,695
Warrant and option derivatives, less current portion	-	13,011,751
Deferred joint venture obligations, less current portion	63,473	-
Deferred revenue, less current portion	3,817,716	1,534,485
Total liabilities	38,506,762	30,133,775
Commitments and contingencies	-	-
STOCKHOLDERS' DEFICIT:		
Preferred stock, $0.001 par value; 50,000,000 shares authorized, 0 issued and outstanding	-	-
Common stock, $0.001par value; 500,000,000 shares authorized, 429,448,381 and 85,027,461 issued and outstanding	429,448	85,027
Additional paid-in capital	53,459,172	34,302,334
Accumulated deficit	(89,817,604)	(55,914,091)
Total stockholders' deficit	(35,928,984)	(21,526,730)
TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT	$ 2,577,778	$ 8,607,045

The accompanying notes are an integral part of these consolidated financial statements.

ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF OPERATIONS
FOR THE YEARS ENDED DECEMBER 31, 2008 AND 2007

	2008	2007 (restated)
Revenue (License fees and royalties)	$ 787,106	$ 647,349
Cost of Revenue	765,769	428,913
Gross profit	21,337	218,436
Operating expenses:		
Research and development	8,635,577	12,744,913
In-process R&D expense - Mytogen	-	4,094,736
Grant reimbursements	(105,169)	(67,179)
General and administrative expenses	5,009,418	6,781,705
Total operating expenses	13,539,826	23,554,175
Loss from operations	(13,518,489)	(23,335,739)
Non-operating income (expense):		
Interest income	7,933	162,091
Interest expense and late fees	(26,614,761)	(21,023,663)
Finance cost	(806,079)	(15,400)
Charges related to issuance of 2008 convertible debentures	(1,217,342)	-
Charges related to issuance of 2007 convertible debenture and warrants	-	(3,871,656)
Charges related to repricing of 2005 convertible debenture and warrants	-	(843,277)
Income related to repricing of 2006 and 2007 convertible debentures and warrants	847,588	-
Adjustments to fair value of derivatives	13,082,247	32,835,057
Losses attributable to equity method investment	(20,930)	-
Loss on disposal of fixed assets	(227,543)	-
Gain (loss) on settlement	(5,436,137)	193,862
Total non-operating income (expense)	(20,385,024)	7,437,014
Loss before income tax	(33,903,513)	(15,898,725)
Income tax	-	-
Net loss	$ (33,903,513)	$ (15,898,725)
Weighted average shares outstanding :		
Basic	245,279,135	61,115,618
Diluted	245,279,135	61,115,618
Loss per share:		
Basic	$ (0.14)	$ (0.26)
Diluted	$ (0.14)	$ (0.26)

The accompanying notes are an integral part of these consolidated financial statements.

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ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' DEFICIT
FOR THE YEARS ENDED DECEMBER 31, 2008 AND 2007

	Common Stock Shares	Common Stock Amount	Additional Paid in Capital	Accumulated Deficit	Total Stockholders' Deficit
Balance December 31, 2006 (Restated)	39,318,070	39,318	12,291,873	(40,015,366)	(27,684,175)
Convertible debentures redemptions	19,243,386	19,243	6,879,914	-	6,899,157
Convertible debentures conversions	16,625,579	16,626	11,069,317	-	11,085,943
Issuance of stock in payment of board fees	35,909	36	20,716	-	20,752
Option compensation charges	-	-	531,113	-	531,113
Issuance of stock in payment of license fees	800,000	800	607,200	-	608,000
Issuance of stock in payment of employee bonuses	515,000	515	406,335	-	406,850
Issuance of stock to employees	340,000	340	16,660	-	17,000
Issuance of stock in payment of legal fees	85,000	85	67,915	-	68,000
Issuance of stock in acquisition of Mytogen	9,064,517	8,064	2,411,291	-	2,419,355
Net loss for the year ended December 31, 2007 (Restated)	-	-	-	(15,898,725)	(15,898,725)
Balance December 31, 2007 (Restated)	85,027,461	$ 85,027	$ 34,302,334	$ (55,914,091)	$ (21,526,730)
Convertible debentures redemptions	65,463,111	65,463	5,390,989	-	5,456,452
Convertible debentures conversions	39,741,987	39,743	6,121,900	-	6,161,643
Issuance of stock for debenture financing costs	14,710,329	14,710	791,369	-	806,079
Option compensation charges	-	-	527,243	-	527,243
Adjustment to fair value of derivatives	-	-	78,367	-	78,367

Issuance in respect of anti-dilution provision of convertible debenture	70,503	71	15,510	-	15,581
Issuance of stock in payment of professional fees	1,002,291	1,002	212,847	-	213,849
Issuance of stock in settlement of accounts payable	220,735,436	220,735	5,818,877	-	6,039,612
Issuance of stock under stock incentive plan	1,497,263	1,497	140,936	-	142,433
Issuance of stock upon exercise of options	1,200,000	1,200	58,800	-	60,000
Net loss for the year ended December 31, 2008	-	-	-	(33,903,513)	(33,903,513)
Balance December 31, 2008	429,448,381	$ 429,448	$ 53,459,172	$ (89,817,604)	$ (35,928,984)

The accompanying notes are an integral part of these consolidated financial statements

ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2008 AND 2007

	2008	2007 (restated)
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (33,903,513)	$ (15,898,725)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	402,867	386,643
Write-off of uncollectible accounts receivable	30,782	-
Amortization of deferred charges	702,018	407,391
Amortization of deferred revenue	(798,310)	(497,349)
Stock based compensation	889,269	531,113
Amortization of deferred issuance costs	4,792,087	3,874,300
Amortization of discounts	17,871,392	17,052,016
Gain on extinguishment of debt	-	(193,862)
Adjustements to fair value of derivatives	(13,082,247)	(32,835,057)
Charges related to issuance of February 2008 convertible notes	685,573	-
Mytogen acquisition	-	4,094,736
Charges related to issuance of April 2008 convertible notes	531,769	-
Charges related to issuance of 2007 convertible debentures	-	3,871,656
Repricing of 2005 convertible debentures and warrants	-	843,277
Repricing of 2006 and 2007 convertible debentures and warrants	(847,588)	-
Shares of common stock issued for professional services	759,496	1,307,828
Shares of common stock issued for board fees	-	20,752
Shares of common stock issued for financing costs	806,079	-
Warrants issued for consulting services	155,281	-
Charges related to settlement of anti-dilution provision	15,581	-
Forfeiture of rent deposits	88,504	-
Loss on disposal of fixed assets	227,543	-
Loss on settlement of litigation	5,436,138	-
Loss attributable to investment in joint venture	20,930	-
Amortization of deferred joint venture obligations	(15,322)	-
(Increase) / decrease in assets:		
Accounts receivable	(265,260)	39,293
Prepaid expenses	35,940	42,812
Deferred charges	-	(55,000)
Increase / (decrease) in current liabilities:		
Accounts payable and accrued expenses	5,355,228	976,712
Interest Payable	3,722,198	-
Deferred revenue	3,418,745	-
Net cash used in operating activities	(2,964,820)	(16,031,464)
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchases of property and equipment	(174,514)	(158,522)
Return of deposits	-	18,649

Net cash used in investing activities		(174,514)		(139,873)
CASH FLOWS FROM FINANCING ACTIVITIES:				
Proceeds from exercise of stock options		-		17,000
Proceeds from issuance of convertible notes, net of cost		2,182,432		8,848,200
Payments on convertible debentures		-		(139,123)
Payments on notes and leases		(18,650)		(77,960)
Proceeds from notes payable		630,000		-
Payment for issuance costs on note payable		(3,660)		-
Net cash provided by financing activities		2,790,122		8,648,117
NET DECREASE IN CASH AND CASH EQUIVALENTS		(349,212)		(7,523,220)
CASH AND CASH EQUIVALENTS, BEGINNING BALANCE		1,166,116		8,689,336
CASH AND CASH EQUIVALENTS, ENDING BALANCE	$	816,904	$	1,166,116
CASH PAID FOR:				
Interest	$	-	$	10,016
Income taxes	$	1,549	$	-
SUPPLEMENTAL DISCLOSURE OF NON-CASH FINANCING ACTIVITIES:				
Issuance of 65,463,111 and 19,243,386 shares of common stock in redemption of convertible debentures	$	5,456,452	$	7,038,000
Issuance of 39,741,987 and 16,625,579 shares of common stock in conversion of convertible debentures	$	6,161,643	$	8,391,000
Issuance of 70,503 shares of common stock to settle an anti-dilution provision feature of convertible debenture	$	15,581	$	-
Issuance of 1,200,000 shares of common stock upon exercise of employee stock options	$	60,000	$	-
Issuance of 220,735,436 shares of common stock in settlement of litigation	$	6,039,612	$	-
Issuance of 35,909 shares of common stock in payment of board fees	$		$	21,000
Issuance of 800,000 shares of common stock in payment of license fees	$		$	608,000
Issuance of 515,000 shares of common stock in payment of employee bonuses	$		$	407,000
Issuance of 85,000 shares of common stock in settlement of legal fees	$		$	68,000
Issuance of 8,064,517 shares of common stock in acquisition of Mytogen	$	-	$	2,419,000

The accompanying notes are an integral part of these consolidated financial statements.

ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
December 31, 2008 and 2007

1. ORGANIZATIONAL MATTERS

Organization

On January 31, 2005, Advanced Cell Technology, Inc. (formerly known as A.C.T. Holdings, Inc.) (the "Company") completed a merger with Advanced Cell, Inc. (formerly known as Advanced Cell Technology, Inc.), a Delaware corporation ("ACT"), pursuant to which a wholly-owned subsidiary of the Company merged with and into ACT, with ACT remaining as the surviving corporation and a wholly-owned subsidiary of the Company. Upon the completion of the merger, the Company ceased all of its pre-merger operations and adopted the business of ACT.

Prior to the merger, the Company had minimal business, operations, revenues and assets, and had been involved in an industry entirely unrelated to the business of ACT. Therefore, the acquisition of ACT by the Company represented a complete change in the nature of the Company's business and operations, and changed the nature of any prior investment in the Company.

The transaction has been accounted for as a recapitalization of ACT, the accounting acquirer. The historical financial statements presented for periods prior to the merger are those of ACT.

On November 18, 2005, a majority of the Company's stockholders approved the reincorporation of the Company from the state of Nevada to the state of Delaware pursuant to a merger of the Company with and into a newly formed Delaware corporation, followed by a "roll up" merger to combine the operating subsidiary with the Company.

Nature of Business

The Company is a biotechnology company focused on developing and commercializing human embryonic and adult stem cell technology in the emerging fields of regenerative medicine. Principal activities to date have included obtaining financing, securing operating facilities, and conducting research and development. The Company has no therapeutic products currently available for sale and does not expect to have any therapeutic products commercially available for sale for a period of years, if at all. These factors indicate that the Company's ability to continue its research and development activities is dependent upon the ability of management to obtain additional financing as required.

Going Concern

As reflected in the accompanying financial statements, the Company has losses from operations, negative cash flows from operations, a substantial stockholders' deficit and current liabilities exceed current assets. The Company may thus not be able to continue as a going concern and fund cash requirements for operations through the next 12 months with current cash reserves. As discussed below, the Company was able to raise additional cash in the second half of 2008 and the first quarter of 2009. Notwithstanding success in raising capital, there continues to be substantial doubt about the Company's ability to continue as a going concern.

In view of the matters described in the preceding paragraph, recoverability of a major portion of the recorded asset amounts shown in the accompanying consolidated balance sheet is dependent upon continued operations of the Company, which, in turn, is dependent upon the Company's ability to continue to raise capital and ultimately generate positive cash flows from operations. The financial statements do not include any adjustments relating to the

recoverability and classification of recorded asset amounts or amounts and classifications of liabilities that might be necessary should the Company be unable to continue its existence.

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Management has taken or plans to take the following steps that it believes will be sufficient to provide the Company with the ability to continue in existence:

- On April 4, 2008, the Company released closing escrow on the issuance of $4,038,880 of its amortizing senior secured convertible debentures and associated warrants. The purchasers purchased from the Company senior secured convertible debentures and warrants to purchase shares of the Company's common stock. The net cash and cash in-kind received by the Company related to this financing was $2,212,432.

- On April 30, 2008 the Company received a one time payment of $300,000 from Terumo International which extended their ability to commence a Phase I Clinical Trial in Japan by one year.

- On May 31, 2008, the Company closed its Alameda, California and Charlestown, Massachusetts facilities in an effort to streamline and focus on its most advanced clinical programs as part of a cost reduction program designed to reduce annual operating expenses by $5-6 million. In conjunction with the cost reduction activities, the Company has not renewed its Alameda, California sublease and has vacated its Charlestown, Massachusetts facility.

- On June 17, 2008, the Company drew down $60,000 and received $50,000 (reflecting a 16.66% original issue discount) under Note B described in Note 8 to the financial statements.

- On July 10, 2008, the Company granted an exclusive license to Embryome Sciences, Inc., a wholly owned subsidiary of BioTime, Inc., to use its "ACTCellerate" embryonic stem cell technology and a bank of over 140 diverse progenitor cell lines derived using that technology. Under the agreement, the Company received an up-front payment of $470,000, and is eligible to receive an 8% royalty on sales of products, services, and processes that utilize the licensed technology. However, as discussed in more detail in Note 18, in connection with unpaid rents ordered to be paid to a landlord, the Company has assigned the landlord rights and interest to 62.5% of all royalties on this contract, and 65% of all other consideration payable under this license agreement until such time that the Company has repaid amounts owed to the landlord that total $475,000.

- Between September 29, 2008 and January 20, 2009, the Company settled certain past due accounts payable by the issuance of shares of its common stock. In aggregate, the Company settled $1,108,673 in accounts payable through the issuance of 260,116,283 shares of its common stock.

- On December 1, 2008, the Company and CHA Bio & Diostech Co., Ltd. ("CHA"), a leading Korean-based biotechnology company focused on the development of stem cell technologies, formed an international joint venture. The new company, Stem Cell & Regenerative Medicine International, Inc. ("SCRMI"), will develop human blood cells and other clinical therapies based on the Company's hemangioblast program, one of the Company's core technologies. CHA has agreed to contribute $150,000 cash and to fund operational costs in order to conduct the hemangioblast program. Additionally, SCRMI has agreed to pay the Company a fee of $500,000 for an exclusive, worldwide license to the Hemangioblast Program. As of June 30, 2009, SCRMI has paid the Company the entire $500,000 towards payment of the license fee. See Note 6 for additional details of the joint venture.

- On December 18, 2008, the Company entered into a license agreement with an Ireland-based investor, Transition Holdings Inc. ("Transition"), for certain of its non-core technology. Under the agreement, Transition agreed to acquire a license to the technology for $3.5 million in cash. Through December 31, 2008, the Company had received $2 million in cash under this agreement. As of June 30, 2009, the Company has received the entire $3.5 million in cash under this agreement. The Company expects to apply the proceeds towards its retinal epithelium ("RPE") cells program.

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- On March 30, 2009, the Company entered into a second license agreement with CHA under which the Company will license its retinal pigment epithelium ("RPE") technology, for the treatment of diseases of the eye, to CHA for development and commercialization exclusively in Korea. The Company is eligible to receive up to a total of $1.9 million in fees based upon the parties achieving certain milestones, including the Company making an IND submission to the US FDA to commence clinical trials in humans using the technology. The Company received an up-front fee under the license in the amount of $1,000,000 on April 1, 2009. Under the agreement, CHA will incur all of the costs associated with the RPA clinical trials in Korea. The agreement is part of continuing cooperation and collaboration between the two companies.

- On March 11, 2009, the Company entered into a $5 million credit facility ("Facility") with a life sciences fund. Under the agreement, the proceeds from the Facility must be used exclusively for the Company to file an investigational new drug ("IND") for its retinal pigment epithelium ("RPE") program, and will allow the Company to complete both Phase I and Phase II studies in humans. An IND is required to commence clinical trials. Under the terms of the agreement, the Company may draw down funds, as needed for clinical development of the RPE program, from the investor through the issuance of Series A-1 convertible preferred stock. The preferred stock pays dividends, in kind of preferred stock, at an annual rate of 10%, matures in four years from the initial issuance date, and is convertible into common stock at $0.75 per share. As of June 30, 2009, the Company has drawn down approximately $1,505,000 on this facility.

- On May 13, 2009, the Company entered into a third license agreement with CHA under which the Company will license its proprietary "single blastomere technology," which has the potential to generate stable cell lines, including RPE for the treatment of diseases of the eye, for development and commercialization exclusively in Korea. The Company received an upfront license fee of $300,000.

- Management anticipates raising additional future capital from its current convertible debenture holders, or other financing sources, that will be used to fund any capital shortfalls. The terms of any financing will likely be negotiated based upon current market terms for similar financings. No commitments have been received for additional investment and no assurances can be given that this financing will ultimately be completed.

- Management has focused its scientific operations on product development in order to accelerate the time to market products which will ultimately generate revenues. While the amount or timing of such revenues cannot be determined, management believes that focused development will ultimately provide a quicker path to revenues, and an increased likelihood of raising additional financing.

- Management will continue to pursue licensing opportunities of the Company's extensive intellectual property portfolio.

2. RESTATEMENT

As indicated in Notes 7 through 11, the Company has issued a series of complex convertible debentures over the past several years. The convertible debentures are issued for less than face value, thus generating significant original issue discounts. In conjunction with the instruments, the Company has issued substantial numbers of warrants, and the value of these warrants as of the issue date is treated in the same manner as an original issue discount. These discounts are amortized into interest expense over the life of the debenture, which is a complex calculation due to the planned monthly redemptions after a certain point included in the debenture agreements. Further, the Debentures are converted into shares at the holder's option, the timing of which depends on the price of the Company's stock. The Company also gives brokers and other intermediaries considerable value via cash and warrants in order to assist in selling the debentures. The costs associated with issuing the debt are capitalized and amortized over the life of the debt.

On September 6, 2006, the Company entered into a securities purchase agreement in which the purchasers purchased from the Company amortizing convertible debentures and warrants to purchase shares of the Company's common stock. In connection with that transaction, and for each quarter thereafter, the Company performed a valuation of the debentures and warrants (see Note 10).

On March 24, 2008, the Company discovered that it had been using an incorrect number of warrants in calculating the appropriate fair value. The Company had been using 4,541,672 warrants instead of the correct number of 19,064,670 warrants. Upon learning of the error, the Company recalculated the correct fair value and noted that this change in warrant valuation had no impact on the value of the related convertible debentures and all the related embedded derivatives.

In mid-May 2008, the Company discovered that the Deferred Issuance costs and discounts had been amortized over a period longer than the weighted average life of the instruments, with the result that the discounts and debt issuance costs should have been charged to interest expense on a faster basis than had been the case. Upon learning of the error the Company has recalculated the amortization and resulting interest expense. The Company also discovered that its calculation of the weighted average shares used in calculating basic and diluted earnings per share for the year ended December 31, 2007 was in error. The actual basic and diluted weighted average shares outstanding for the year ended December 31, 2007 was approximately 20,238,000 shares higher than reported.

In accordance with Statement of Accounting Standards No. 154, the Company has determined that these were errors, and has therefore restated the accompanying statements of operations, and cash flows for the year ended December 31, 2007 and the balance sheet as of December 31, 2007.

	As Originally Reported	Restated	Difference
December 31, 2007			
Balance Sheet			
Deferred issuance costs	$ 5,107,599	$ 4,772,087	$ (335,512)
2005 Convertible debenture and embedded derivatives – current portion	$ 1,040,156	$ 1,276,871	$ 236,715
2006 Convertible debenture and embedded derivatives – current portion	$ 906,860	$ 1,625,327	$ 718,467
2007 Convertible debenture and embedded derivatives – current portion	$ 363,805	$ 1,160,847	$ 797,042

2006 Convertible debenture and embedded derivatives, less current portion	$ 793,504	$ 1,422,164	$ 628,660
2007 Convertible debenture and embedded derivatives, less current portion	$ 2,364,731	$ 2,321,695	$ (43,036)
Accumulated deficit	$ (53,240,732)	$ (55,914,091)	$ (2,673,359)
Total stockholders' deficit at December 31, 2007	$ (18,853,371)	$ (21,526,730)	$ (2,673,359)

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	As Originally Reported	Restated	Difference
Year Ended December 31, 2007			
Statement of Operations			
Interest expense	$ (18,350,304)	$ ($21,023,663)	$ (2,673,359)
Net loss	$ (13,225,366)	$ (15,898,725)	$ (2,673,359)
Basic and diluted loss per share	$ (0.32)	$ (0.26)	$ (0.06)
Weighted average shares – basic and diluted	40,877,145	61,115,618	20,238,473
Statement of Cash Flows			
Net loss	$ (13,225,366)	$ (15,898,725)	$ (2,673,359)
Amortization of deferred issuance cost	$ 3,538,788	$ 3,874,300	$ 335,512
Amortization of discount	$ 14,714,169	$ 17,052,016	$ 2,337,847

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation—The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”).

Principles of Consolidation —The accounts of the Company and Mytogen, Inc. (“Mytogen”) are included in the accompanying consolidated financial statements for the period from September 20, 2007 to December 31, 2007. On September 20, 2007, a newly formed subsidiary of the Company merged into Mytogen to effect a reorganization of Mytogen. As a result of the merger, the Company became the owner of 100% of the outstanding shares of Mytogen. During the period from September 20, 2007 to December 31, 2008, all intercompany balances and transactions were eliminated in consolidation.

Segment Reporting —SFAS No. 131, “Disclosure about Segments of an Enterprise and Related Information” requires use of the “management approach” model for segment reporting. The management approach model is based on the way a company’s management organizes segments within the company for making operating decisions and assessing performance. The Company determined it has one operating segment. Disaggregation of the Company’s operating results is impracticable, because the Company’s research and development activities and its assets overlap, and management reviews its business as a single operating segment. Thus, discrete financial information is not available by more than one operating segment.

Use of Estimates —These consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States and, accordingly, require management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Specifically, the Company’s management has estimated variables used to calculate the Black-Scholes and binomial lattice model calculations used to value derivative instruments as discussed below under “Fair Value Measurements”. In addition, management has estimated the expected economic life and value of the Company’s licensed technology, the Company’s net operating loss for tax purposes, share-based payments for compensation to employees, directors, consultants and investment banks, and the useful lives of the Company’s fixed assets and its accounts receivable allowance. Actual results could differ from those estimates.

Reclassifications—Certain prior year financial statement balances have been reclassified to conform to the current year presentation. These reclassifications had no effect on the recorded net loss.

Cash and Cash Equivalents —Cash equivalents are comprised of certain highly liquid investments with maturities of three months or less when purchased. The Company maintains its cash in bank deposit accounts, which at times, may exceed federally insured limits. The Company has not experienced any losses related to this concentration of risk. As of December 31, 2008 and 2007, the Company had deposits in excess of federally-insured limits totaling $655,074 and $965,042, respectively. The Company has not experienced any losses in such accounts.

Accounts Receivable —The Company periodically assesses its accounts receivable for collectability on a specific identification basis. Past due status on accounts receivable is based on contractual terms. If collectability of an account becomes unlikely, the Company records an allowance for that doubtful account. Once the Company has exhausted efforts to collect, management writes off the account receivable against the allowance it has already created. The Company does not require collateral for its trade accounts receivable.

Property and Equipment — The Company records its property and equipment at historical cost. The Company expenses maintenance and repairs as incurred. Upon disposition of property and equipment, the gross cost and accumulated depreciation are written off and the difference between the proceeds and the net book value is recorded as a gain or loss on sale of assets. In the case of certain assets acquired under capital leases, the assets are recorded net of imputed interest, based upon the net present value of future payments. Assets under capital lease are pledged as collateral for the related lease.

The Company provides for depreciation over the assets' estimated useful lives as follows:

Machinery & equipment	4 years
Computer equipment	3 years
Office furniture	4 years
Leasehold improvements	Lesser of lease life or economic life
Capital leases	Lesser of lease life or economic life

Equity Method Investment — The Company follows Accounting Principles Board Opinion No. 18 The Equity Method of Accounting for Investments in Common Stock ("APB No. 18") in accounting for its investment in the joint venture. In the event the Company's share of the joint venture's net losses reduces the Company's investment to zero, the Company will discontinue applying the equity method and will not provide for additional losses unless the Company has guaranteed obligations of the joint venture or is otherwise committed to provide further financial support for the joint venture. If the joint venture subsequently reports net income, the Company will resume applying the equity method only after its share of that net income equals the share of net losses not recognized during the period the equity method was suspended.

Deferred Issuance Costs —Payments, either in cash or share-based payments, made in connection with the sale of debentures are recorded as deferred debt issuance costs and amortized using the effective interest method over the lives of the related debentures. The weighted average amortization period for deferred debt issuance costs is 36 months.

Intangible and Long-Lived Assets— The Company follows Statement of Financial Accounting Standards ("FAS") No. 144, "Accounting for Impairment of Disposal of Long-Lived Assets," which established a "primary asset" approach to determine the cash flow estimation period for a group of assets and liabilities that represents the unit of accounting for a long-lived asset to be held and used. Long-lived assets to be held and used are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. Long-lived assets to be disposed of are reported at the lower of carrying amount or fair value less cost to sell. During the years ended December 31, 2008 and 2007, no impairment

loss was recognized.

Fair Value Measurements — For certain financial instruments, including accounts receivable, accounts payable, accrued expenses, interest payable, advances payable and notes payable, the carrying amounts approximate fair value due to their relatively short maturities.

Emerging Issues Task Force ("EITF") No. 00-19 "Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in, a Company's Own Stock" ("EITF 00-19"), provides a criteria for determining whether freestanding contracts that are settled in a company's own stock, including common stock options and warrants, should be designated as either an equity instrument, an asset or as a liability under SFAS No. 133 "Accounting for Derivative Instruments and Hedging Activities." Under the provisions of EITF 00-19, a contract designated as an asset or a liability must be carried at fair value on a company's balance sheet, with any changes in fair value recorded in a company's results of operations. Using the criteria in EITF 00-19, the Company has determined that its outstanding options and warrants require liability accounting and records the fair values as warrant and option derivatives.

On January 1, 2008, the Company adopted FAS No. 157, "Fair Value Measurements" ("FAS 157"). FAS 157 defines fair value, and establishes a three-level valuation hierarchy for disclosures of fair value measurement that enhances disclosure requirements for fair value measures. The carrying amounts reported in the consolidated balance sheets for receivables and current liabilities each qualify as financial instruments and are a reasonable estimate of their fair values because of the short period of time between the origination of such instruments and their expected realization and their current market rate of interest. The three levels of valuation hierarchy are defined as follows:

- Level 1 inputs to the valuation methodology are quoted prices for identical assets or liabilities in active markets.
- Level 2 inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- Level 3 inputs to the valuation methodology are unobservable and significant to the fair value measurement.

FAS 133, "Accounting for Derivative Instruments and Hedging Activities" requires bifurcation of embedded derivative instruments and measurement of fair value for accounting purposes. In addition, FAS 155, "Accounting for Certain Hybrid Financial Instruments" requires measurement of fair values of hybrid financial instruments for accounting purposes. The Company applied the accounting prescribed in FAS 133 to account for its 2005 Convertible Debenture as described in Note 11. For practicality in the valuation of the debentures and for ease of presentation, the Company applied the accounting prescribed in FAS 155 to account for the 2006, 2007, February 2008, and April 2008 Convertible Debentures as described below in Notes 7, 8, 9, and 10.

In determining the appropriate fair value of the debentures, the Company used Level 2 inputs for its valuation methodology. For the periods from January 1, 2007 through September 30, 2008, the Company applied the Black-Scholes models, Binomial Option Pricing models, Standard Put Option Binomial models and the net present value of certain penalty amounts to value the debentures and their embedded derivatives. At December 31, 2008, to achieve greater cost efficiencies, the Company changed its application of the Income Approach as defined under paragraph 18 of FAS 157, by applying the Black-Scholes option pricing model in valuing all debentures and their embedded derivatives. This change did not materially impact the results of the Company's valuations of its debentures and embedded derivatives. The impact of the change in the application of the Income Approach was approximately 1.4% of the fair value of the Company's debentures and their embedded derivatives. FAS 157, paragraph 20 states that the disclosure provisions of Statement of Financial Accounting Standards No. 154 Accounting Changes and Error Corrections ("FAS 154") for a change in accounting estimate are not required for revisions resulting from a change in a valuation technique or its application.

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Derivative liabilities are adjusted to reflect fair value at each period end, with any increase or decrease in the fair value being recorded in results of operations as Adjustments to Fair Value of Derivatives. The effects of interactions between embedded derivatives are calculated and accounted for in arriving at the overall fair value of the financial instruments. In addition, the fair values of freestanding derivative instruments such as warrant and option derivatives are valued using the Black-Scholes model.

At December 31, 2008, the Company identified the following assets and liabilities that are required to be presented on the balance sheet at fair value:

Derivative Liabilities	Fair Value As of December 31, 2008	Fair Value Measurements at December 31, 2008 Using Fair Value Hierarchy		
		Level 1	Level 2	Level 3
Conversion feature - 2005 debenture	4,075	-	4,075	-
2006 Convertible debenture and embeded derivatives	1,993,354	-	1,993,354	-
2007 Convertible debenture and embedded derivatives	7,706,344	-	7,706,344	-
February 2008 Convertible debentures and embedded derivatives	1,757,470	-	1,757,470	-
April 2008 Convertible debenture and embedded derivatives	4,066,505	-	4,066,505	-
Warrant and option derivatives	2,655,849	-	2,655,849	-
	18,183,597	-	18,183,597	-

For the year ended December 31, 2008 and 2007, the Company recognized a gain of $13,082,247 and $32,835,057, respectively, for the changes in the valuation of the aforementioned liabilities.

The Company did not identify any other non-recurring assets and liabilities that are required to be presented in the consolidated balance sheets at fair value in accordance with FAS 157.

In February 2007, the FASB issued FAS No. 159, “The Fair Value Option for Financial Assets and Financial Liabilities” (“FAS 159”). FAS 159 permits entities to choose to measure many financial assets and financial liabilities at fair value. Unrealized gains and losses on items for which the fair value option has been elected are reported in earnings. FAS 159 is effective as of the beginning of an entity’s first fiscal year that begins after November 15, 2007. The Company adopted FAS 159 on January 1, 2008. The Company chose not to elect the option to measure the fair value of eligible financial assets and liabilities.

Revenue Recognition — The Company’s revenues are generated from license and research agreements with collaborators. Licensing revenue is recognized on a straight-line basis over the shorter of the life of the license or the estimated economic life of the patents related to the license. License fee revenue begins to be recognized in the first full month following the effective date of the license agreement. Deferred revenue represents the portion of the license and other payments received that has not been earned. Costs associated with the license revenue are deferred and recognized over the same term as the revenue. Reimbursements of research expense pursuant to grants are recorded in the period during which collection of the reimbursement becomes assured, because the reimbursements are subject to approval.

Research and Development Costs —Research and development costs consist of expenditures for the research and development of patents and technology, which cannot be capitalized. The Company’s research and development costs consist mainly of payroll and payroll related expenses, research supplies and research grants. Reimbursements of research expense pursuant to grants are recorded in the period during which collection of the reimbursement becomes

assured, because the reimbursements are subject to approval. Research and development costs are expensed as incurred.

Share-Based Compensation —Effective January 1, 2006, the Company adopted the fair value recognition provisions of FAS 123(R), using the modified-prospective transition method. Under this method, stock-based compensation expense is recognized in the consolidated financial statements for stock options granted, modified or settled after the adoption date. In accordance with FAS 123(R), the unamortized portion of options granted prior to the adoption date is recognized into earnings after adoption. Results for prior periods have not been restated, as provided for under the modified-prospective method.

Under FAS 123(R), stock-based compensation expense recognized is based on the value of the portion of share-based payment awards that are ultimately expected to vest during the period. Based on this, our stock-based compensation is reduced for estimated forfeitures at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

The fair value of each stock option is estimated on the date of grant using the Black-Scholes option pricing model. Assumptions relative to volatility and anticipated forfeitures are determined at the time of grant with the following weighted average assumptions used in the years ended December 31, 2008 and 2007:

	Year Ended December 31,	
	2008	2007
Expected life in years	4.0	4.0
Volatility	148%	163%
Risk free interest rate	2.50%	4.74%
Expected dividends	None	None
Expected forfeitures	13%	13%

The assumptions used in the Black-Scholes models referred to above are based upon the following data: (1) The expected life of the option is estimated by considering the contractual term of the option, the vesting period of the option, the employees' expected exercise behavior and the post-vesting employee turnover rate. (2) The expected stock price volatility of the underlying shares over the expected term of the option is based upon historical share price data. (3) The risk free interest rate is based on published U.S. Treasury Department interest rates for the expected terms of the underlying options. (4) Expected dividends are based on historical dividend data and expected future dividend activity. (5) The expected forfeiture rate is based on historical forfeiture activity and assumptions regarding future forfeitures based on the composition of current grantees.

In accordance with FAS 123(R), the benefits of tax deductions in excess of the compensation cost recognized for options exercised during the period are classified as financing cash inflows rather than operating cash inflows.

Income Taxes — Deferred income taxes are provided using the liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss and tax credit carryforwards, and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax bases. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of the changes in tax laws and rates of the date of enactment.

When tax returns are filed, it is highly certain that some positions taken would be sustained upon examination by the taxing authorities, while others are subject to uncertainty about the merits of the position taken or the amount of the position that would be ultimately sustained. The benefit of a tax position is recognized in the financial statements in the period during which, based on all available evidence, management believes it is more likely than not that the

position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Tax positions taken are not offset or aggregated with other positions. Tax positions that meet the more-likely-than-not recognition threshold are measured as the largest amount of tax benefit that is more than 50 percent likely of being realized upon settlement with the applicable taxing authority. The portion of the benefits associated with tax positions taken that exceeds the amount measured as described above is reflected as a liability for unrecognized tax benefits in the accompanying balance sheet along with any associated interest and penalties that would be payable to the taxing authorities upon examination.

Applicable interest and penalties associated with unrecognized tax benefits are classified as additional income taxes in the statement of income.

Net Loss Per Share— Earnings per share is calculated in accordance with the SFAS No. 128, “Earnings Per Share” (“SFAS 128”). Basic earnings per share is based upon the weighted average number of common shares outstanding. Diluted earnings per share is based on the assumption that all dilutive convertible shares and stock options were converted or exercised. Dilution is computed by applying the treasury stock method. Under this method, options and warrants are assumed to be exercised at the beginning of the period (or at the time of issuance, if later), and as if funds obtained thereby were used to purchase common stock at the average market price during the period.

At December 31, 2008 and 2007, approximately 270,206,000 and 67,000,000 potentially dilutive shares, respectively, were excluded from the shares used to calculate diluted earnings per share as their inclusion would be anti-dilutive.

Concentrations and Other Risks —Currently, the Company’s revenues and accounts receivable are concentrated on a small number of customers. The following table shows the Company’s concentrations of its revenue for those customers comprising greater than 10% of total revenue.

	2008	2007
Genzyme Transgenics Corporation	17%	20%
START Licensing, Inc.	13%	15%
Exeter Life Sciences, Inc.	16%	19%
Terumo Corporation	25%	N/A
International Stem Cell Corporation	11%	N/A

Other risks include the uncertainty of the regulatory environment and the effect of future regulations on the Company’s business activities. As the Company is a biotechnology research and development company, there is also the attendant risk that someone could commence legal proceedings over the Company’s discoveries. Acts of God could also adversely affect the Company’s business.

Recent Accounting Pronouncements

In September 2006, the FASB issued FAS 157 “Fair Value Measurements.” This Statement defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles (GAAP), and expands disclosures about fair value measurements. This Statement applies under other accounting pronouncements that require or permit fair value measurements, the Board having previously concluded in those accounting pronouncements that fair value is the relevant measurement attribute. Accordingly, this Statement does not require any new fair value measurements. However, for some entities, the application of this Statement will change current practice. This Statement is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. Earlier application is encouraged, provided that the reporting entity has not yet issued financial statements for that fiscal year, including financial statements for an interim period within that fiscal year. The Company has adopted FAS 157 beginning January 1, 2008 and does not believe the adoption had a material impact on our financial position, results of operations or cash flows.

In February 2007, the FASB issued FAS No. 159, “The Fair Value Option for Financial Assets and Financial Liabilities”. This Statement permits entities to choose to measure many financial assets and financial liabilities at fair value. Unrealized gains and losses on items for which the fair value option has been elected are reported in earnings. FAS No. 159 is effective as of the beginning of an entity’s first fiscal year that begins after November 15, 2007. The Company adopted FAS No. 159 on January 1, 2008. The Company chose not to elect the option to measure the fair value of eligible financial assets and liabilities.

In June 2007, the FASB issued FASB Staff Position No. EITF 07-3, “Accounting for Nonrefundable Advance Payments for Goods or Services Received for use in Future Research and Development Activities” (“FSP EITF 07-3”), which addresses whether nonrefundable advance payments for goods or services that used or rendered for research and development activities should be expensed when the advance payment is made or when the research and development activity has been performed. The implementation of EITF 07-3 did not have an impact on the Company’s consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141(R), “Business Combinations” (“SFAS 141R”), which replaced SFAS 141. SFAS 141R retains the purchase method of accounting for acquisitions, but requires a number of changes, including changes in the way assets and liabilities are recognized in the purchase accounting as well as requiring the expensing of acquisition-related costs as incurred. Furthermore, SFAS 141R provides guidance for recognizing and measuring the goodwill acquired in the business combination and determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. SFAS 141R is effective for fiscal years beginning on or after December 15, 2008. Earlier adoption is prohibited. The Company believes adopting FAS No. 141R will significantly impact its financial statements for any business combination completed after December 31, 2008.

In December 2007, the FASB issued SFAS No. 160, “Noncontrolling Interests in Consolidated Financial Statements — An Amendment of ARB No. 51” (“SFAS 160”). SFAS 160 amends ARB 51 to establish accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. It is intended to eliminate the diversity in practice regarding the accounting for transactions between equity and noncontrolling interests by requiring that they be treated as equity transactions. Further, it requires consolidated net income to be reported at amounts that include the amounts attributable to both the parent and the noncontrolling interest. SFAS 160 also establishes a single method of accounting for changes in a parent’s ownership interest in a subsidiary that do not result in deconsolidation, requires that a parent recognize a gain or loss in net income when a subsidiary is deconsolidated, requires expanded disclosures in the consolidated financial statements that clearly identify and distinguish between the interests of the parent’s owners and the interests of the noncontrolling owners of a subsidiary, among others. SFAS 160 is effective for fiscal years beginning on or after December 15, 2008, with early adoption permitted, and it is to be applied prospectively. SFAS 160 is to be applied prospectively as of the beginning of the fiscal year in which it is initially applied, except for the presentation and disclosure requirements, which must be applied retrospectively for all periods presented. The adoption of SFAS 160 will not have an impact on the Company’s consolidated financial statements.

In February 2008, the FASB issued FASB Staff Position No. 157-1 ("FSP 157-1"), "Application of FASB Statement No. 157 to FASB Statement No. 13 and Other Accounting Pronouncements That Address Fair Value Measurements for Purposes of Lease Classification or Measurement under Statement 13." FSP 157-1 is effective upon initial adoption of SFAS 157, and indicates that it does not apply under SFAS 13, "Accounting for Leases" and other accounting pronouncements that address fair value measurements for purposes of lease classification or measurement under SFAS 13. This scope exception does not apply to assets acquired and liabilities assumed in a business combination that are required to be measured at fair value under SFAS 141 or SFAS 141R, regardless of whether those assets and liabilities are related to leases. The adoption of FSP 157-1 did not have an impact on the Company’s consolidated financial statements.

Also in February 2008, the FASB issued FASB Staff Position No. 157-2 ("FSP 157-2"), "Effective Date of FASB Statement No. 157." With the issuance of FSP 157-2, the FASB agreed to: (a) defer the effective date in SFAS No. 157 for one year for certain nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually), and (b) remove certain leasing transactions from the scope of SFAS 157. The deferral is intended to provide the FASB time to consider the effect of certain implementation issues that have arisen from the application of SFAS 157 to these assets and liabilities.

In March 2008, the FASB issued SFAS No. 161, "Disclosures about Derivative Instruments and Hedging Activities" (“SFAS 161”). SFAS 161 is intended to improve financial reporting of derivative instruments and hedging activities by requiring enhanced disclosures to enable financial statement users to better understand the effects of derivatives and hedging on an entity's financial position, financial performance and cash flows. The provisions of SFAS 161 are effective for interim periods and fiscal years beginning after November 15, 2008, with early adoption encouraged. The Company does not anticipate that the adoption of SFAS 161 will have a material impact on its consolidated results of operations or consolidated financial position.

In April 2008, the FASB issued FASB Staff Position No. 142-3 “Determination of the useful life of Intangible Assets” (“FSP 142-3”), which amends the factors a company should consider when developing renewal assumptions used to determine the useful life of an intangible asset under SFAS142. This Issue is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. SFAS 142 requires companies to consider whether renewal can be completed without substantial cost or material modification of the existing terms and conditions associated with the asset. FSP 142-3 replaces the previous useful life criteria with a new requirement—that an entity consider its own historical experience in renewing similar arrangements. If historical experience does not exist then the Company would consider market participant assumptions regarding renewal including 1) highest and best use of the asset by a market participant, and 2) adjustments for other entity-specific factors included in SFAS 142. The Company does not anticipate that the adoption of FSP 142-3 will have a material impact on its consolidated results of operations or consolidated financial position.

In May 2008, the FASB issued SFAS No. 162, "The Hierarchy of Generally Accepted Accounting Principles" (“SFAS 162”). SFAS 162 is intended to improve financial reporting by identifying a consistent framework, or hierarchy, for selecting accounting principles to be used in preparing financial statements that are presented in conformity with GAAP for nongovernmental entities. SFAS 162 is effective 60 days following the SEC's approval of the Public Company Accounting Oversight Board (“PCAOB”) amendments to AU Section 411, "The Meaning of Present Fairly in Conformity with Generally Accepted Accounting Principles." The Company does not expect the adoption of SFAS 162 will have a material impact on its consolidated results of operations or consolidated financial position.

On May 9, 2008, the FASB issued FASB Staff Position No. APB 14-1 ("FSP APB 14-1"), "Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement)." FSP APB 14-1 clarifies that convertible debt instruments that may be settled in cash upon conversion (including partial cash settlement) are not addressed by paragraph 12 of APB Opinion No. 14, "Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants." Additionally, FSP APB 14-1 specifies that issuers of such instruments should separately account for the liability and equity components in a manner that will reflect the entity's nonconvertible debt borrowing rate when interest cost is recognized in subsequent periods. FSP APB14-1 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. The Company is currently evaluating the impact that FSP APB 14-1 will have on its consolidated results of operations or consolidated financial position.

On June 16, 2008, the FASB issued FSP No. EITF 03-6-1 (“FSP EITF 03-6-1”), “Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities,” to address the question of whether instruments granted in share-based payment transactions are participating securities prior to vesting. FSP EITF 03-6-1 indicates that unvested share-based payment awards that contain rights to dividend payments should be included in earnings per share calculations. The guidance will be effective for fiscal years beginning after December 15, 2008. The Company is currently evaluating the requirements of FSP EITF 03-6-1 and the impact that its adoption will have on the consolidated results of operations or consolidated financial position.

In June 2008, the FASB issued Emerging Issues Task Force Issue 07-5 (“EITF 07-5”), “Determining whether an Instrument (or Embedded Feature) is indexed to an Entity’s Own Stock.” EITF 07-5 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. Early application is not permitted. Paragraph 11(a) of SFAS No. 133 “Accounting for Derivatives and Hedging Activities,” specifies that a contract that would otherwise meet the definition of a derivative but is both (a) indexed to the Company’s own stock and (b) classified in stockholders’ equity in the statement of financial position would not be considered a derivative financial instrument. EITF 07-5 provides a new two-step model to be applied in determining whether a financial instrument or an embedded feature is indexed to an issuer’s own stock and thus able to qualify for the SFAS 133 paragraph 11(a) scope exception. This standard triggers liability accounting on all options and warrants exercisable at strike prices denominated in any currency other than the functional currency of the operating entity. The Company does not expect the adoption of EITF 07-5 will have an impact on its consolidated results of operations or consolidated financial position.

In June 2008, FASB issued EITF 08-4, “Transition Guidance for Conforming Changes to Issue No. 98-5.” The objective of EITF 08-4 is to provide transition guidance for conforming changes made to EITF 98-5, “Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios,” that result from EITF 00-27 “ Application of Issue No. 98-5 to Certain Convertible Instruments,” and SFAS 150, “Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity.” EITF 08-4 is effective for financial statements issued for fiscal years ending after December 15, 2008. Early application is permitted. The Company is currently evaluating the impact of adoption of EITF 08-4 on the accounting for the convertible notes and related warrants transactions.

On October 10, 2008, the FASB issued FSP 157-3, “Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active,” which clarifies the application of SFAS 157 in a market that is not active and provides an example to illustrate key considerations in determining the fair value of a financial asset when the market for that financial asset is not active. FSP 157-3 became effective on October 10, 2008, and its adoption did not have a material impact on the Company’s consolidated results of operations or consolidated financial position.

In January 2009, the FASB issued FSP EITF 99-20-1, “Amendments to the Impairment Guidance of EITF Issue No. 99-20, and EITF Issue No. 99-20, Recognition of Interest Income and Impairment on Purchased and Retained Beneficial Interests in Securitized Financial Assets” (“FSP EITF 99-20-1”). FSP EITF 99-20-1 changes the impairment model included within EITF 99-20 to be more consistent with the impairment models of FAS No. 115. FSP EITF 99-20-1 achieves this by amending the impairment model in EITF 99-20 to remove its exclusive reliance on “market participant” estimates of future cash flows used in determining fair value. Changing the cash flows used to analyze other-than-temporary impairment from the “market participant” view to a holder’s estimate of whether there has been a “probable” adverse change in estimated cash flows allows companies to apply reasonable judgment in assessing whether an other-than-temporary impairment has occurred. The adoption of FSP EITF 99-20-1 will not have a material impact on the Company’s consolidated financial statements.

In April 2009, the FASB issued FSP FAS 157-4, “Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly” (“FSP FAS 157-4”). FSP FAS 157-4 provides additional guidance for estimating fair value measurements in accordance with FASB Statement No. 157 when there is not an active market or where the price inputs being used represent distressed sales. FSP FAS 157-4 provides additional guidance on the major categories for which equity and debt securities disclosures are to be presented and amends the disclosure requirements of FASB Statement No. 157 to require disclosure in interim and annual periods of the inputs and valuation technique(s) used to measure fair value and a discussion of changes in valuation techniques and related inputs, if any, during the period. FSP FAS 157-4 shall be applied prospectively and is effective for interim and annual reporting periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity early adopting this FSP must also early adopt

FSP No. FAS 115-2 and FAS 124-2, Recognition and Presentation of Other-Than-Temporary Impairment ("FSP FAS 115-2 and FAS 124-2"). The Company is in the process of evaluating the impact, if any, of applying this FSP on its financial position, results of operations and cash flows.

In April 2009, the FASB issued FSP FAS 115-2 and FAS 124-2. This FSP amends SFAS 115, "Accounting for Certain Investments in Debt and Equity Securities," SFAS 124, "Accounting for Certain Investments Held by Not-for-Profit Organizations," and EITF Issue No. 99-20, "Recognition of Interest Income and Impairment on Purchased Beneficial Interests and Beneficial Interests That Continue to Be Held by a Transferor in Securitized Financial Assets," to make the other-than-temporary impairments guidance more operational and to improve the presentation of other-than-temporary impairments in the financial statements. This FSP will replace the existing requirement that the entity's management assert it has both the intent and ability to hold an impaired debt security until recovery with a requirement that management assert it does not have the intent to sell the security, and it is more likely than not it will not have to sell the security before recovery of its cost basis. This FSP provides increased disclosure about the credit and noncredit components of impaired debt securities that are not expected to be sold and also requires increased and more frequent disclosures regarding expected cash flows, credit losses, and an aging of securities with unrealized losses. Although this FSP does not result in a change in the carrying amount of debt securities, it does require that the portion of an other-than-temporary impairment not related to a credit loss for a held-to-maturity security be recognized in a new category of other comprehensive income and be amortized over the remaining life of the debt security as an increase in the carrying value of the security. This FSP shall be effective for interim and annual periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity may early adopt this FSP only if it also elects to early adopt FSP FAS 157-4. Also, if an entity elects to early adopt either FSP FAS 157-4 or FSP FAS 107-1 and APB 28-1, the entity also is required to early adopt this FSP. The Company is currently evaluating this new FSP but does not believe that it will have a significant impact on the determination or reporting of the financial results.

In April 2009, the FASB issued FSP No. FAS 107-1 and APB 28-1, "Interim Disclosures about Fair Value of Financial Instruments" ("FSP FAS 107-1 and APB 28-1"). FSP FAS 107-1 and APB 28-1 requires companies to disclose in interim financial statements the fair value of financial instruments within the scope of FASB Statement No. 107, Disclosures about Fair Value of Financial Instruments. However, companies are not required to provide in interim periods the disclosures about the concentration of credit risk of all financial instruments that are currently required in annual financial statements. The fair-value information disclosed in the footnotes must be presented together with the related carrying amount, making it clear whether the fair value and carrying amount represent assets or liabilities and how the carrying amount relates to what is reported in the balance sheet. FSP FAS 107-1 and APB 28-1 also requires that companies disclose the method or methods and significant assumptions used to estimate the fair value of financial instruments and a discussion of changes, if any, in the method or methods and significant assumptions during the period. The FSP shall be applied prospectively and is effective for interim and annual periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. An entity early adopting FSP FAS 107-1 and APB 28-1 must also early adopt FSP FAS 157-4 as well as FSP FAS 115-2 and FAS 124-2. The Company will adopt the disclosure requirements of this pronouncement for the quarter ended June 30, 2009, in conjunction with the adoption of FSP FAS 157-4, FSP FAS 115-2 and FAS 124-2.

In May 2009, the FASB issued SFAS No. 165, "Subsequent Events" ("SFAS 165"). SFAS 165 sets forth the period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements, the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements, and the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. SFAS 165 will be effective for interim or annual period ending after June 15, 2009 and will be applied prospectively. The Company will adopt the requirements of this pronouncement for the quarter ended June 30, 2009. The Company does not anticipate the adoption of SFAS 165 will have an impact on its consolidated results of operations or consolidated financial position.

4. LICENSE REVENUE

On April 30, 2008 the Company received a one time payment of $300,000 from Terumo International which extended their ability to commence a Phase I Clinical Trial in Japan by one year. All other terms and conditions for the license agreement between Terumo and the Company remain the same. The Company has recorded $200,000 in license fee revenue for the year ended December 31, 2008 in its accompanying consolidated statements of operations, and the remainder of the license fee has been accrued in deferred revenue in the accompanying consolidated balance sheet at December 31, 2008. The Company is recognizing revenue from this agreement over the one-year extension period.

On May 23, 2008, the Company received $150,000 from International Stem Cells, Inc. as a continuing annual payment to renew its license fee for use of certain of the Company’s technologies. The Company has recorded $87,500 in license fee revenue for the year ended December 31, 2008 in its accompanying consolidated statements of operations, and the remainder of the license fee has been accrued in deferred revenue in the accompanying consolidated balance sheet at December 31, 2008. The Company is recognizing revenue from this agreement over a one-year period.

On July 10, 2008, the Company granted an exclusive license to Embryome Sciences, Inc., a wholly owned subsidiary of BioTime, Inc., to use its “ACTCellerate” embryonic stem cell technology and a bank of over 140 diverse progenitor cell lines derived using that technology. Under the agreement, the Company received an up-front payment of $470,000, and is eligible to receive an 8% royalty on sales of products, services, and processes that utilize the licensed technology. However, in connection with the rent judgment discussed in Note 18, in connection with unpaid rents owed with its landlord, the Company has assigned the landlord rights and interest to 62.5% of all royalties on this contract, and 65% of all other consideration payable under this license agreement until such time that the Company has repaid amounts owed to the landlord that total $475,000. The Company has recorded $12,288 in license fee revenue for the year ended December 31, 2008 in its accompanying consolidated statements of operations, and the remainder of the license fee has been accrued in deferred revenue in the accompanying consolidated balance sheet at December 31, 2008. The Company is recognizing revenue from this agreement over its 17-year patent useful life.

On December 18, 2008, the Company entered into a license agreement with Transition for certain of the Company’s non-core technology. Under the agreement, Transition agreed to acquire a license to the technology for a total of $3.5 million in cash. As of December 31, 2008, the Company had received $2,000,000, less wire fees, in cash under this agreement. The Company received the remaining $1,500,000 in 2009. The Company expects to apply the proceeds towards its retinal epithelium (“RPE”) cells program. The Company has not recorded license fee revenue for the year ended December 31, 2008 as the effective date of the agreement was December 18, 2008 and the Company’s policy is to begin recognition of revenue in the first full month following the effective date of the license agreement. The license fee has been accrued in deferred revenue in the accompanying consolidated balance sheet at December 31, 2008. The Company is recognizing revenue from this agreement over its 17-year patent useful life.

In connection with the joint venture agreement discussed in Note 6, on December 1, 2008, the Company entered into a license agreement with CHA for the exclusive, worldwide license to the Hemangioblast Program. Under the agreement, CHA agreed to acquire the Company’s core technology for $500,000 in cash. As of December 31, 2008, the Company had received $250,000. The Company received the remaining $250,000 in January 2009. Accordingly, the Company has recorded $250,000 in accounts receivable in its consolidated balance sheets at December 31, 2008. The Company has recorded $2,450 in license fee revenue for the year ended December 31, 2008 in its accompanying consolidated statements of operations, and the remainder of the license fee has been accrued in deferred revenue at December 31, 2008. The Company is recognizing revenue from this agreement over its 17-year patent useful life.

5. PROPERTY AND EQUIPMENT

Property and equipment consisted of the following at December 31, 2008 and 2007:

	2008	2007
Machinery & equipment	$ 1,470,141	$ 1,552,642
Computer equipment	436,541	424,612
Office furniture	76,201	76,201
Leasehold improvements	127,197	127,197
Capital leases	51,235	238,754
Accumulated depreciation	(1,761,307)	(1,504,902)
Property and equipment, net	$ 400,008	$ 914,504

Depreciation expense for the years ended December 31, 2008 and 2007 amounted to $402,867 and $386,643, respectively.

6. INVESTMENT IN JOINT VENTURE

On December 1, 2008, the Company and CHA Bio & Diostech Co., Ltd. ("CHA"), a leading Korean-based biotechnology company focused on the development of stem cell technologies, formed an international joint venture. The new company, Stem Cell & Regenerative Medicine International, Inc. ("SCRMI"), will develop human blood cells and other clinical therapies based on the Company's hemangioblast program, one of the Company's core technologies. Under the terms of the agreement, the Company purchased upfront a 33% interest in the joint venture, and will receive another 7% interest upon fulfilling certain obligations under the agreement over a period of 3 years. The Company's contribution includes (a) the uninterrupted use of a portion of its leased facility at the Company's expense, (b) the uninterrupted use of certain equipment in the leased facility, and (c) the release of certain of the Company's research and science personnel to be employed by the joint venture. In return, for a 67% interest, CHA has agreed to contribute $150,000 cash and to fund all operational costs in order to conduct the hemangioblast program.

The Company has agreed to collaborate with the joint venture in securing grants to further research and development of its technology. Additionally, SCRMI has agreed to pay the Company a fee of $500,000 for an exclusive, worldwide license to the Hemangioblast Program. The Company has recorded $2,450 in license fee revenue for the year ended December 31, 2008 in its accompanying consolidated statements of operations, and the remainder of the license fee has been accrued in deferred revenue in the accompanying consolidated balance sheet at December 31, 2008.

Accounting Principles Board Opinion 18 The Equity Method of Accounting for Investments in Common Stock ("APB 18"), paragraph 19a requires that the difference between the cost of an investment and the amount of underlying equity in net assets of an investee should be accounted for as if the investee were a consolidated subsidiary. The Company has calculated the difference between the cost of the investment and the amount of underlying equity in net assets of the joint venture to be $196,130, based on the Company's initial cost basis in the investment of $246,130, less its 33.3% of the initial equity in net assets of the joint venture of $50,000. The Company will amortize the $196,130 over the term of the shorter of the equipment usage or lease term (through April 2010, or 17 months from December 1, 2008). The amortization will be applied against the value of the Company's investment. Amortization expense for the month of December 2008 was $11,537.

The following table is a summary of key financial data for the joint venture as of and for the year ended December 31, 2008:

Current assets	$ 179,400
Noncurrent assets	$ 468,150
Current liabilities	$ 76,869
Noncurrent liabilities	$ 468,150
Net revenue	$ 2,450
Net loss	$ (62,791)

7. CONVERTIBLE NOTE PAYABLE—APRIL 2008

On April 4, 2008, the Company entered into a Securities Purchase Agreement with accredited investors for the issuance of an aggregate of $4,038,880 principal amount of senior secured convertible debentures with an original issue discount of $820,648 representing approximately 20.32%. The amortizing senior secured convertible debentures issued at the closing of the 2008 financing will be due and payable one (1) year from the closing, and will not bear interest. The cash purchase price excluding refinancing of bridge debt and in-kind payments was $2,212,432. Refinanced bridge debt consisted of the aggregate $130,000 in unsecured convertible notes previously issued and sold to PDPI LLC and The Shapiro Family Trust on March 21, 2008. The net outstanding amount of principal plus interest of the Notes was converted into the debt within the April 2008 debenture on a dollar-for-dollar basis. Dr. Shapiro, one of the Company's directors, may be deemed the beneficial owner of the securities owned by The Shapiro Family Trust. The convertible debentures are convertible beginning on the six-month anniversary of the effective date of the note at the option of the holders into 26,925,867 shares of common stock at a fixed conversion price of $0.15 per share, subject to anti-dilution and other customary adjustments. The Company has classified the note as short term in the accompanying consolidated balance sheet as of December 31, 2008. The debenture contains no restrictions as to the use of the proceeds, and is intended to fund the Company's working capital obligations. As of June 30, 2009, the entire debenture balance remains outstanding.

Under the terms of the agreements, principal amounts owed under the debentures become due and payable commencing six months following closing of the transaction. At that time, and each month thereafter, the Company is required to either repay 1/30 of the outstanding balance owed in common stock at the lesser of the then conversion price or 80% of the weighted average price for common shares for the 10 trading days prior to the amortization payment date. The debenture agreement does not limit the number of shares that the Company could be required to issue.

The note contains a provision that modifies the conversion rate to $0.15 per common share and the warrant exercise price to $0.165 per common share, issued to the April 2008 note payable subscribers who are also participants in the 2005, 2006, and 2007 debentures. The Company has considered the impact of Emerging Issue Task Force statements, or EITFs 96 - 19— Debtor's Accounting for a Modification or Exchange of Debt Instruments, 02 - 4—Determining Whether a Debtor's Modification or Exchange of Debt Instruments is Within the Scope of FASB No. 15, and 05 - 7—Accounting for Modifications to Conversion Options Embedded in Debt Instruments and Related Issues on the accounting treatment of the change in conversion price of the 2005, 2006, and 2007 Convertible Debentures described above. EITF 96 - 19 states that a transaction resulting in a significant change in the nature of a debt instrument should be accounted for as an extinguishment of debt. The Company has concluded that the change in conversion price and warrant exercise price does not constitute a significant change in the nature of the debt and that the transaction should not be treated as an extinguishment of that debt.

In connection with this financing, the Company accrued cash fees to a placement agent of $20,000 and issued warrants to purchase 26,925,867 shares of Common Stock at an exercise price of $0.165 per share. The term of the warrants is five years and is subject to anti-dilution and other customary adjustments. The initial fair value of the warrants was estimated at $2,587,521 using the Black-Scholes pricing model. The warrants were again valued at $709,384 at December 31, 2008 at fair value using the Black-Scholes model, representing a decrease in the fair value of the liability of $1,878,137 from the debenture's inception date, which was recorded through the results of operations as an adjustment to fair value of derivatives. The Company issued warrants to purchase an aggregate of 4,263,962 shares of common stock of the Company at an exercise price of $0.165 to T.R. Winston & Company, LLC as consideration for placement agent services provided in connection with the Debenture. The term of the warrants is five years and is subject to anti-dilution and other customary adjustments. The initial fair value of the warrants was estimated at $412,732 using the Black-Scholes pricing model. The warrants were again valued at $112,659 at December 31, 2008 at fair value using the Black-Scholes model, representing a decrease in the fair value of the liability of $300,073 from the debenture's inception date, which was recorded through the results of operations as an adjustment to fair value of derivatives. The assumptions used in the Black-Scholes option pricing model at April 4, 2008 for all warrants issued in connection with this Debenture are as follows: (1) dividend yield of 0%; (2) expected volatility of 145%, (3) risk-free interest rate of 2.63%, and (4) expected life of 5.0 years. The assumptions used in the Black-Scholes option pricing model at December 31, 2008 for all warrants issued in connection with this Debenture are as follows: (1) dividend yield of 0%; (2) expected volatility of 185%, (3) risk-free interest rate of 0.37%, and (4) expected life of 4.3 years. Cash fees accrued in the amount of $20,000, the initial fair value of the original issue discount in the amount of $820,649, and the initial fair value of the warrant discount in the amount of $3,000,253 were capitalized as debt issuance costs (cash paid) and debt discounts (original issue discount and warrant discount), respectively, and have been amortized in full during the year ended December 31, 2008 due to the August 6, 2008 default as discussed below.

Under the terms of the agreement, beginning October 1, 2008, the Company is to amortize the note resulting in complete repayment by the maturity date. The Company may make the amortization payment in either cash or equity. If the payment is made in common stock, the stock will be issued at a price per share equal to the lesser of (i) the then conversion price, and (ii) 80% of the weighted average price for common shares for the 10 trading days prior to the amortization payment date. As of June 30, 2009, no note amortization has occurred and the note is in default as discussed below.

The agreement entered into provides that the Company will pay certain cash amounts as liquidated damages in the event that the Company does not maintain an effective registration statement, or if the Company fails to timely execute stock trading activity. Additionally, penalties will be incurred by the Company in the event of potential default conditions.

As long as any portion of this debenture remains outstanding, unless the holders of at least 67% in principal amount of the then outstanding debentures otherwise give prior written consent, the Company is not permitted to (a) guarantee or borrow any indebtedness, (b) enter into any liens, (c) amend its charter documents in any manner that materially and adversely affects any rights of the holders, (d) acquire more than a de minimis number of shares of its common stock equivalents other than as to conversion shares of warrant shares as permitted or required and repurchases of common stock or common stock equivalents of departing officers and directors of the Company, provided that such purchases do not exceed certain specified amounts, (e) repay any indebtedness, other than the debentures already issued on a pro-rata basis, other than regularly scheduled principle payments as such terms are in effect under this debenture, (f) pay cash dividends or distributions on any equity securities of the Company, (g) enter into any material transaction with any affiliate of the Company, unless such transaction is made on an arm’s-length basis, or (h) enter into any agreement with respect to any of the above.

The Company has complied with the provisions of FAS 155 “Accounting for Certain Hybrid Financial Instruments”, and recorded the fair value of the convertible debentures and related embedded conversion option. The initial fair value of the debentures and embedded conversion option was valued using a combination of Binomial and Black-Scholes models, resulting in a fair value of $4,570,649 at April 4, 2008. The convertible debenture is convertible at the option of the holders into a total of 26,925,867 shares of common stock at a conversion price of $0.15 per share, subject to anti-dilution and other customary adjustments. The excess of $531,769 of this value over the face value of the note was recorded through the results of operations as charges related to issuance of April 2008 convertible note payable. The fair value of the debentures and embedded conversion option was $4,066,505 at December 31, 2008, which includes the face value of the note of $4,038,880, plus the $27,625 fair value of the embedded conversion option. The embedded conversion option was valued using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model at December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 185%, (3) risk-free interest rate of 0.37%, and (4) expected life of 4.3 years. The change in fair value of the embedded conversion option of $504,144 is recorded through the results of operations as an adjustment to the fair value of derivatives for the year ended December 31, 2008.

The following table summarizes the changes in the fair values of the respective liabilities versus the values at April 4, 2008:

		Fair Value at		
Face Amount	Net Purchase Price	April 4, 2008	December 31, 2008	Increase (Decrease)
$ 4,038,880	$ 3,218,232	$ 4,570,649	$ 4,066,505	$ (504,144)

As of December 31, 2008, the outstanding principal amount for the 2008 Convertible Debentures is $4,038,880. Interest expense for the year ended December 31, 2008 was $3,840,902.

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On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 12 for the default interest expense recognized during the year ended December 31, 2008.

8. CONVERTIBLE NOTES PAYABLE—FEBRUARY 2008

The Company issued and sold a $600,000 unsecured convertible note dated as of February 15, 2008 (“Note A”) to JMJ Financial, for a net purchase price of $500,000 (reflecting a 16.66% original issue discount) in a private placement. Note A bears interest at the rate of 12% per annum, and is due by February 15, 2010. At any time after the 180th day following the effective date of Note A, the holder may at its election convert all or part of Note A plus accrued interest into shares of the Company's common stock at the conversion rate of the lesser of: (a) $0.38 per share, or (b) 80% of the average of the three lowest trade prices in the 20 trading days prior to the conversion. Pursuant to the Use of Proceeds Agreement entered into in connection with the issuance of Note A, the Company is required to use the proceeds from Note A solely for research and development dedicated to adult stem cell research.

Effective February 15, 2008, in exchange for $1,000,000 in the form of a Secured & Collateralized Promissory Note (the “JMJ Note”) issued by JMJ Financial to the Company, the Company issued and sold an unsecured convertible note (“Note B”) to JMJ Financial in the aggregate principal amount of $1,200,000 or so much as may be paid towards the balance of the JMJ Note. Note B bears interest at the rate of 10% per annum, and is due by February 15, 2010. At any time following the effective date of Note B, the holder may at its election convert all or part of Note B plus accrued interest into shares of the Company’s common stock at the conversion rate of the lesser of: (a) $0.38 per share, or (b) 80% of the average of the three lowest trade prices in the 20 trading days prior to the conversion. In connection with the issuance of Note B, the Company entered into a Collateral and Security Agreement dated as of February 15, 2008 with JMJ Financial pursuant to which the Company granted JMJ Financial a security interest in certain of its assets securing the JMJ Note. As of December 31, 2008, the Company had drawn down and received the following amounts under Note B:

- On March 17, 2008 — $60,000 for a net purchase price of $50,000 (reflecting a 16.66% original issue discount).
- On June 17, 2008 — $60,000 for a net purchase price of $50,000 (reflecting a 16.66% original issue discount).

As long as any portion of this debenture remains outstanding, unless the holders of at least 67% in principal amount of the then outstanding debentures otherwise give prior written consent, the Company is not permitted to (a) guarantee or borrow any indebtedness, (b) enter into any liens, (c) amend its charter documents in any manner that materially and adversely affects any rights of the holders, (d) acquire more than a de minimis number of shares of its common stock equivalents other than as to conversion shares of warrant shares as permitted or required and repurchases of common stock or common stock equivalents of departing officers and directors of the Company, provided that such purchases do not exceed certain specified amounts, (e) repay any indebtedness, other than the debentures already issued on a pro-rata basis, other than regularly scheduled principle payments as such terms are in effect under this debenture, (f) pay cash dividends or distributions on any equity securities of the Company, (g) enter into any material transaction with any affiliate of the Company, unless such transaction is made on an arm’s-length basis, or (h) enter into any agreement with respect to any of the above.

The debenture agreement does not limit the number of shares that the Company could be required to issue. The convertible debenture is convertible at the option of the holders into a total of 45,000,000 shares of common stock at a conversion price of $0.016 per share, subject to anti-dilution and other customary adjustments. The conversion options included in Note A and Note B represent embedded derivative instruments. Accordingly, the Company has complied with the provisions of FAS 155 "Accounting for Certain Hybrid Financial Instruments". The fair values of Note A and Note B and the related embedded derivatives, valued using a Monte Carlo simulation model, were recorded as of February 15, 2008. The excess of these values over the face values of Note A and Note B was recorded through the results of operations as charges related to the issuance of the February 2008 convertible notes payable. The fair value of the debentures and embedded conversion options was $1,757,470 at December 31, 2008, which includes the face value of the debentures of $720,000, plus the $1,037,470 fair value of the embedded conversion options. The embedded conversion options were valued using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model at December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 185%, (3) risk-free interest rate of 0.37%, and (4) expected life of 1.1 years. The change in fair value of the embedded conversion option of $301,256 is recorded through the results of operations as an adjustment to the fair value of derivatives for the year ended December 31, 2008.

The following table summarizes the changes in the fair values of the respective liabilities versus the values at February 15, 2008, March 17, 2008, and June 17, 2008.

			Fair Value at		
	Face Amount	Net Purchase Price	February 15, 2008	December 31, 2008	Increase (Decrease)
Note A	$ 600,000	$ 500,000	$ 1,229,466	$ 1,464,558	$ 235,092
Note B, Tranche 1	60,000	50,000	116,107*	146,456	30,349
Note B, Tranche 2	60,000	50,000	110,641**	146,456	35,815
Total	$ 720,000	$ 600,000	$ 1,456,214	$ 1,757,470	$ 301,256

* Fair value at March 17, 2008

** Fair value at June 17, 2008

As of December 31, 2008, the outstanding principal amount for the 2008 Convertible Debentures is $720,000. Interest expense for the year ended December 31, 2008 was $144,972.

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 12 for the default interest expense recognized during the year ended December 31, 2008.

9. CONVERTIBLE DEBENTURES—2007

On August 31, 2007, to fund its continuing operations, the Company entered into a Securities Purchase Agreement with accredited investors for the issuance of an aggregate of $12,550,000 principal amount of convertible debentures with an original issue discount of $2,550,000 representing approximately 20.3%. In connection with the closing of the sale of the debentures, the Company received gross proceeds of $10,000,000. The convertible debentures are convertible at the option of the holders into 36,911,765 shares of common stock at a fixed conversion price of $0.34 per share, subject to anti-dilution and other customary adjustments. In connection with the Securities Purchase Agreement, the Company also issued warrants to purchase an aggregate of 43,240,655 shares of its common stock.

The term of the warrants is five years and the exercise price is $0.38 per share, subject to anti-dilution and other customary adjustments. The conversion price and warrant exercise price have each been modified for those subscribers who also participated in the April 2008 convertible note. See Note 7. The investors have contractually agreed to restrict their ability to convert the convertible debentures, exercise the warrants and exercise the additional investment right and receive shares of the Company's common stock such that the number of shares of the Company's common stock held by them and their affiliates after such conversion or exercise does not exceed 4.99% of the Company's then issued and outstanding shares of its common stock.

The April 2008 note (see Note 7) contains a provision that modifies the conversion rate to $0.15 per common share and the warrant exercise price to $0.165 per common share, issued to the April 2008 debenture subscribers who are also participants in the 2007 debentures. The Company has considered the impact of Emerging Issue Task Force statements, or EITFs 96 - 19— Debtor's Accounting for a Modification or Exchange of Debt Instruments, 02 - 4—Determining Whether a Debtor's Modification or Exchange of Debt Instruments is Within the Scope of FASB No. 15, and 05 - 7—Accounting for Modifications to Conversion Options Embedded in Debt Instruments and Related Issues on the accounting treatment of the change in conversion price of the 2007 Convertible Debentures. EITF 96 - 19 states that a transaction resulting in a significant change in the nature of a debt instrument should be accounted for as an extinguishment of debt. The Company has concluded that the change in conversion price and warrant exercise price does not constitute a significant change in the nature of the debt and that the transaction should not be treated as an extinguishment of that debt. The Company initially recorded an additional debt discount in the amount of $451,389 to income related to repricing of 2006 and 2007 convertible debentures and warrants at April 4, 2008 for the impact of the change in the conversion price. As a result of the change in the exercise price of the warrants, 2,399,264 warrants remained at $0.38 exercise price and the remaining 34,512,501 warrants were adjusted to the $0.165 exercise price as a result of participation in the April 2008 debenture. The convertible debentures are convertible at the option of the holders into 1,999,387 and 42,554,652 shares of common stock at a fixed conversion price of $0..34 per share and $0.15 per share, respectively, subject to anti-dilution and other customary adjustments. See Note 7.

The agreements entered into provide that the Company will pay certain cash amounts as liquidated damages in the event that the Company does not maintain an effective registration statement, or if the Company fails to timely execute stock trading activity.

Under the terms of the agreements, principal amounts owed under the debentures become due and payable commencing six months following closing of the transaction. At that time, and each month thereafter, the Company is required to either repay 1/30 of the outstanding balance owed in common stock at the lesser of $0.34 per share or 80% of the prior ten day's average closing stock price, immediately preceding the redemption. The agreements also provide that the Company may force conversion of outstanding amounts owed under the debentures into common stock, if the Company has met certain conditions and milestones, and additionally, has a stock price for 20 consecutive trading days that exceeds 200% of the conversion price. The debenture agreement does not limit the number of shares that the Company could be required to issue.

As long as any portion of this debenture remains outstanding, unless the holders of at least 67% in principal amount of the then outstanding debentures otherwise give prior written consent, the Company is not permitted to (a) guarantee or borrow any indebtedness, (b) enter into any liens, (c) amend its charter documents in any manner that materially and adversely affects any rights of the holders, (d) acquire more than a de minimis number of shares of its common stock equivalents other than as to conversion shares of warrant shares as permitted or required and repurchases of common stock or common stock equivalents of departing officers and directors of the Company, provided that such purchases do not exceed certain specified amounts, (e) pay cash dividends or distributions on any equity securities of the Company, (f) enter into any material transaction with any affiliate of the Company, unless such transaction is made on an arm's-length basis, or (g) enter into any agreement with respect to any of the above.

The agreement included an embedded conversion option, and the Company has complied with the provisions of FAS 155 "Accounting for Certain Hybrid Financial Instruments", and recorded the fair value of the convertible debentures, and the related embedded derivatives, as of August 31, 2007. The fair value of the debentures and embedded conversion option was $7,706,344 at December 31, 2008, which includes the face value of the debentures of $6,986,297, plus the $722,047 fair value of the embedded conversion option. The embedded conversion option was valued using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model at December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 185%, (3) risk-free interest rate of 0.76%, and (4) expected life of 1.7 years. The change in fair value of the embedded conversion option of $1,649,969 is recorded through the results of operations as an adjustment to the fair value of derivatives for the year

ended December 31, 2008.

In connection with this financing, the Company paid cash fees to a placement agent of $1,001,800 and issued a warrant to purchase 6,328,890 shares of common stock at an exercise price of $0.38 per share (modified to $0.165 for holders who are also subscribers of the April 2008 note payable – see Note 7). The initial fair value of the warrant was estimated at $2,025,000 using the Black-Scholes pricing model. The broker-dealer warrants were again valued at December 31, 2008 at fair value using the Black-Scholes model, resulting in a decrease in the fair value of the liability from December 31, 2007 of approximately $750,864, which was recorded through the results of operations as an adjustment to fair value of derivatives. The assumptions used in the Black-Scholes model at December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 184%, (3) risk-free interest rate of 1.6%, and (4) expected life of 3.8 years. Cash fees paid, and the initial fair value of the warrant, were capitalized on the date of the note, and have been amortized in full during the year ended December 31, 2008 due to the August 6, 2008 default as discussed below.

The following table summarizes the 2007 Convertible Debentures and discounts outstanding at December 31, 2008 and December 31, 2007:

	December 31, 2008	December 31, 2007
2007 convertible debentures at fair value	$ 7,706,344	$ 11,622,078
Original issue discount	-	(6,063,955)
Warrant derivative discount	-	(2,075,581)
Net convertible debentures	$ 7,706,344	$ 3,482,542
Less current portion	(7,706,344)	(1,160,847)
2007 convertible debenture and embedded derivatives - long term	$ -	$ 2,321,695

As of December 31, 2008 and 2007, the outstanding principal amount for the 2007 Convertible Debentures is $6,984,297 and $12,550,000, respectively. Interest expense for the years ended December 31, 2008 and 2007 was $10,830,351 and $336,353, respectively.

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 12 for the default interest expense recognized during the year ended December 31, 2008.

10. CONVERTIBLE DEBENTURES—2006

On September 6, 2006, to fund its continuing operations, the Company entered into a Securities Purchase Agreement with accredited investors for the issuance of an aggregate of $10,981,250 principal amount of convertible debentures with an original issue discount of $2,231,250 representing approximately 20.3%. In connection with the closing of the sale of the debentures, the Company received gross proceeds of $8,750,000. The Company may make the amortization payment in either cash or equity. If the payment is made in common stock, the stock will be issued at a price per share equal to the lesser of (i) the then conversion price, and (ii) 70% of the weighted average price for common shares for the 10 trading days prior to the amortization payment date. The debenture agreement does not limit the number of shares that the Company could be required to issue. In connection with the issuance of the debenture, the Company also issued warrants to purchase 19,064,670 shares of common stock at an initial price of $0.3168 per share (modified to $0.165 for holders who are also subscribers of the April 2008 note payable – see Note 7) and exercisable for five years. The warrants were valued using the Black-Scholes option pricing model. The

assumptions used in the Black-Scholes option pricing model at December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 185%, (3) risk-free interest rate of 1.00%, and (4) expected life of 2.7 years. The change in fair value of the embedded conversion option of $2,238,905 is recorded through the results of operations as an adjustment to the fair value of derivatives for the year ended December 31, 2008.

The agreement included an embedded conversion option, and the Company has complied with the provisions of FAS 155 “Accounting for Certain Hybrid Financial Instruments”, and recorded the fair value of the convertible debentures, and related embedded derivatives, as of September 6, 2006. The fair value of the debentures and embedded conversion option was $1,993,354 at December 31, 2008, which includes the face value of the debentures of $1,941,595, plus the $51,759 fair value of the embedded conversion option. The embedded conversion option was valued using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes option pricing model at December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 185%, (3) risk-free interest rate of 0.37%, and (4) expected life of 0.7 years. The change in fair value of the embedded conversion option of $937,712 is recorded through the results of operations as an adjustment to the fair value of derivatives for the year ended December 31, 2008.

As long as any portion of this debenture remains outstanding, unless the holders of at least 67% in principal amount of the then outstanding debentures otherwise give prior written consent, the Company is not permitted to (a) guarantee or borrow any indebtedness, (b) enter into any liens, (c) amend its charter documents in any manner that materially and adversely affects any rights of the holders, (d) acquire more than a de minimis number of shares of its common stock equivalents other than as to conversion shares of warrant shares as permitted or required and repurchases of common stock or common stock equivalents of departing officers and directors of the Company, provided that such purchases do not exceed certain specified amounts, (e) pay cash dividends or distributions on any equity securities of the Company, or (f) enter into any agreement with respect to any of the above.

The April 2008 note (see Note 7) contains a provision that modifies the conversion rate to $0.15 per common share and the warrant exercise price to $0.165 per common share, issued to the April 2008 note payable subscribers who are also participants in the 2006 debentures. The Company has considered the impact of Emerging Issue Task Force statements, or EITFs 96 - 19— Debtor’s Accounting for a Modification or Exchange of Debt Instruments, 02 - 4—Determining Whether a Debtor’s Modification or Exchange of Debt Instruments is Within the Scope of FASB No. 15, and 05 - 7—Accounting for Modifications to Conversion Options Embedded in Debt Instruments and Related Issues on the accounting treatment of the change in conversion price of the 2006 Convertible Debentures. EITF 96 - 19 states that a transaction resulting in a significant change in the nature of a debt instrument should be accounted for as an extinguishment of debt. The Company has concluded that the change in conversion price and warrant exercise price does not constitute a significant change in the nature of the debt and that the transaction should not be treated as an extinguishment of that debt. The Company initially recorded an additional debt discount in the amount of $396,199 to income related to the repricing of the 2006 and 2007 convertible debentures and warrants at August 6, 2008 for the impact of the change in the conversion price. As a result of the change in the exercise price of the warrants, 6,572,626 warrants remained at the $0.3168 exercise price and the remaining 12,492,044 warrants were adjusted to the $0.165 exercise price upon participation in the April 2008 debenture. The convertible debentures are convertible at the option of the holders into 3,866,563 and 5,936,924 shares of common stock at a fixed conversion price of $0.288 per share and $0.15 per share, respectively, subject to anti-dilution and other customary adjustments. See Note 7.

The following table summarizes the 2006 Convertible Debentures and discounts outstanding at December 31, 2008 and 2007:

	December 31, 2008	December 31, 2007
2006 convertible debentures at fair value	$ 1,993,354	$ 7,386,912
Original issue discount	-	(3,777,403)
Warrant derivative discount	-	(562,018)
Net convertible debentures	$ 1,993,354	$ 3,047,491
Less current portion	(1,993,354)	(1,625,327)
2006 convertible debenture and embedded derivatives - long term	$ -	$ 1,422,164

In connection with this financing, the Company paid cash fees to a broker-dealer of $525,000 and issued a warrant to purchase 4,575,521 shares of common stock at an exercise price of $0.3168 per share (modified for holders who are also subscribers of the April 2008 note payable – see Note 7). The broker-dealer warrants were again valued at December 31, 2008 at fair value using the Black-Scholes model, resulting in a decrease in the fair value of the liability of approximately $517,539 and $1,901,059 for the years ended December 31, 2008 and 2007, respectively, which was recorded through the results of operations as a debit to Adjustments to Fair Value of Derivatives. The assumptions used in the Black-Scholes model at December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 184%, (3) risk-free interest rate of 0.08%, and (4) expected life of approximately 2.75 years. Cash fees paid, and the initial fair value of the warrant, were capitalized on the date of the note, and have been amortized in full during the year ended December 31, 2008 due to the August 6, 2008 default as discussed below.

As of December 31, 2008, the outstanding principal amount for the 2006 Convertible Debentures is $1,941,595. Interest expense for the years ended December 31, 2008 and 2007 was $6,420,695 and $2,692,931, respectively.

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 12 for the default interest expense recognized during the year ended December 31, 2008.

11. CONVERTIBLE DEBENTURES—2005

On September 15, 2005, to fund its continuing operations, the Company entered into a Securities Purchase Agreement with accredited investors for the issuance of an aggregate of $22,276,250 principal amount of convertible debentures with an original issue discount of $4,526,250 representing approximately 20.3%. In connection with the closing of the sale of the debentures, the Company received gross proceeds of $17,750,000. The Company may make the amortization payment in either cash or equity, beginning six months from the closing date of this debenture. If the payment is made in common stock, the stock will be issued at a price per share equal to the lesser of (i) the then conversion price, and (ii) 85% of the weighted average price for common shares for the 10 trading days prior to the amortization payment date. The debenture agreement does not limit the number of shares that the Company could be required to issue.

The agreement included a an embedded conversion option that required separate valuation in accordance with the requirements of FAS 133, EITF –00-27 and related accounting literature. The fair value at December 31, 2008 of the derivative for the conversion feature was valued as an American call option using the Black-Scholes option pricing model with the following inputs: (1) closing stock price from $0.03 (2) exercise price equal to the $0.15 conversion price (3) volatility based upon the Company's stock trading of 185% (4) risk-free interest rate of 1.00%, and (5) expected life of 1 year.

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During years ended December 31, 2008 and 2007, a decrease in the fair value of the embedded derivative amounts of approximately $195,140 and $2,872,000, respectively, was recorded through results of operations as adjustment to fair value of derivatives.

In connection with this financing, we paid cash fees to a broker-dealer of $1,065,000 and issued a warrant to purchase 1,623,718 shares of Common Stock at an adjusted exercise price of $0.165 per share. The fair value of the warrant as of December 31, 2008 was estimated at approximately $7,000 using the Black-Scholes option pricing model. The assumptions used in the Black-Scholes model are as follows: (1) dividend yield of 0%; (2) expected volatility of 184%, (3) risk-free interest rate of 0.04, and (4) expected life of 1 year. Cash fees paid, and the initial fair value of the warrant, were capitalized on the date of the note, and have been amortized in full during the year ended December 31, 2008 due to the August 6, 2008 default as discussed below. During the years ended December 31, 2008 and 2007, the Company recorded approximately $600,278 and $4,007,113, respectively, as interest expense in its accompanying consolidated statements of operations.

In January 2007, the Company's Board of Directors agreed to reduce the exercise price of the warrants issued in connection with the 2005 debentures to $0.95 per share and to reduce the conversion price of the debentures to $0.90 per share. The conversion price and warrant exercise price have each been further modified in April 2008 for those subscribers who also participated in the April 2008 convertible note. See Note 7.

The Company has considered the impact of Emerging Issue Task Force statements, or EITFs 96 - 19— Debtor's Accounting for a Modification or Exchange of Debt Instruments, 02 - 4—Determining Whether a Debtor's Modification or Exchange of Debt Instruments is Within the Scope of FASB No. 15, and 05 - 7—Accounting for Modifications to Conversion Options Embedded in Debt Instruments and Related Issues on the accounting treatment of the change in conversion price of the 2005 Convertible Debentures described in the paragraph above. EITF 96 - 19 states that a transaction resulting in a significant change in the nature of a debt instrument should be accounted for as an extinguishment of debt. The Company has concluded that the change in conversion price and warrant exercise price does not constitute a significant change in the nature of the debt and that the transaction should not be treated as an extinguishment of that debt.

Anti-dilution Impact

As a result of the 2007 Financing, described more fully in Note 9, the warrants issued in connection with the 2005 Financing were automatically diluted down to $0.34. The result of this was to impact both the number and price of the original warrants and replacement warrants issued to both the investors and the brokers.

The new number of original warrants issued to investors totaled 2,335,005. The broker-dealer warrants were again valued at December 31, 2008 at fair value using the Black-Scholes model, resulting in a decrease in the fair value of the liability of $234,392 for the year ended December 31, 2008, which was recorded through the results of operations as a credit to Adjustments to Fair Value of Derivatives. The assumptions used in the Black-Scholes model to value the warrants as of December 31, 2008 were as follows: (1) dividend yield of 0%; (2) expected volatility of 184%, (3) risk-free interest rate of 0.08%, and (4) expected life of 1.5 years.

The new number of replacement warrants issued to investors and brokers totaled 12,689,966. As a result of the change in the exercise price of the warrants, 3,239,810 warrants remained at the $0.34 exercise price and the remaining 9,450,156 warrants were adjusted to the $0.165 exercise price upon participation in the April 2008 debenture. The warrants were again valued at December 31, 2008 at fair value using the Black-Scholes model, resulting in a decrease in the fair value of the liability of approximately $1,402,947 for the year ended December 31, 2008, which was recorded through the results of operations as a credit to Adjustments to Fair Value of Derivatives. The assumptions used in the Black-Scholes model are as follows: (1) dividend yield of 0%; (2) expected volatility of 184%, (3) risk-free interest rate of 0.08%, and (4) expected life of 2.71 years.

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The following table summarizes the 2005 Convertible Debentures and embedded derivatives outstanding at December 31, 2008 and 2007:

	December 31, 2008	December 31, 2007
2005 convertible debenture at face value	$ 81,922	$ 1,677,904
Discounts on debentures		
Original issue discount	-	(152,073)
Conversion feature derivative	-	(193,084)
Warrant derivative	-	(245,825)
Other derivatives	-	(9,266)
Net convertible debentures	81,922	1,077,656
Embedded derivatives	4,075	199,215
2005 convertible debentures and embedded derivatives	85,997	1,276,871
less current portion	(85,997)	(1,276,871)
2005 convertible debenture and embedded derivatives - long term portion	$ -	$ -

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. As a result of the default, the Company has recognized additional penalty interest, and has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance as short term. See Note 12 for the default interest expense recognized during the year ended December 31, 2008.

12. ACCRUED DEFAULT INTEREST

On August 6, 2008, the Company issued a moratorium on amortization of all outstanding debentures. As of June 30, 2009, the moratorium remains in effect. Under the terms of the debenture agreements, the moratorium constitutes an event of default and thus the debentures all incur default interest penalties. The debenture agreements require in the event of default that the full principle amount of the debentures, together with other amounts owing in respect thereof, to the date of acceleration shall become, at the Holder's election, immediately due and payable in cash. The aggregate amount payable upon event of default shall be equal to the mandatory default amount. The mandatory default amount equals the sum of (i) the greater of: (A) 120% of the principle amount of the debentures to be repaid plus 100% of the accrued and unpaid interest, or (B) the principle amount of the debentures to be repaid, divided by the conversion price on (x) the date the mandatory default amount came due or (y) the date the mandatory default amount is paid in full, whichever is less, multiplied by the closing price on (x) the date the mandatory default amount is demanded or otherwise due or (y) the date the mandatory default amount is paid in full, whichever is greater, and (ii) all other amounts, costs, expenses and liquidated damages due in respect to the debentures. Commencing 5 days after the occurrence of any event of default that results in the eventual acceleration of the debentures, the interest rate on the debentures shall accrue at the rate of 18% per annum. Further, as a result of the default, the Company has recognized the remaining balance of its debt discounts associated with this note in interest expense, and classified the entire balance in short term. The following table summarizes the accrued default interest expense recognized in the accompanying consolidated statements of operations for the year ended December 31, 2008, as well as the consolidated balance sheet at December 31, 2008:

		Accrued Penalty Interest
2005 debenture	$	22,121
2006 debenture		524,284
2007 debenture		1,885,951
February 2008 debenture		194,420
April 2008 debenture		1,090,608
	$	3,717,384

13. WARRANT DERIVATIVES—OTHER

In January 2008 the Company issued 680,636 warrants to purchase common stock at $0.39 per share in connection with consulting services provided during the previous quarter. The warrants were initially valued at $112,492 using the Black-Scholes option pricing model. These warrants are classified as a warrant derivative liability. The warrants were again valued at December 31, 2008 at fair value using the Black-Scholes pricing model resulting in a decrease in the fair value of the liability of $90,397 for the year ended December 31, 2008, which was recorded through the results of operations as adjustments to fair value of derivatives. The assumptions used in the Black-Scholes model as of December 31, 2008 are as follows: (1) dividend yield of 0%; (2) expected volatility of 184%, (3) risk-free interest rate of 1.55%, and (4) expected life of 9.1 years.

14. WARRANT SUMMARY

Warrant Activity

A summary of warrant activity for the year ended December 31, 2008 is presented below:

	Number of Warrants		Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)		Aggregate Intrinsic Value (000)
Outstanding, December 31, 2007	104,700,522	$	0.29	3.55	$	495
Granted	31,870,465		0.15			
Exercised	-		-			
Forfeited	(7,173,036)		0.25			
Outstanding, December 31, 2008	129,397,951	$	0.26	3.23		-
Vested and expected to vest at December 31, 2008	129,397,951		0.26	3.23		-
Exercisable, December 31, 2008	129,397,951	$	0.26	3.23		-

The aggregate intrinsic value in the table above is before applicable income taxes and is calculated based on the difference between the exercise price of the warrants and the quoted price of the Company’s common stock as of the reporting date.

A summary of the status of unvested warrants as of December 31, 2008 and changes during the year then ended, is presented below:

	Warrants Outstanding			Warrants Exercisable	
Exercise Price	Number of Shares	Weighted Average Remaining Life (Years)	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
$0.17	107,450,081	3.30	$ 0.17	107,450,081	$ 0.17
0.32	4,575,521	2.68	0.32	4,575,521	0.32
0.38 - 0.40	9,409,526	4.08	0.38	9,409,526	0.38
0.85 - 0.96	5,869,831	1.92	0.95	5,869,831	0.95
2.20	72,917	2.63	2.20	72,917	2.20
2.48 - 2.54	2,020,075	0.93	2.54	2,020,075	2.54
	129,397,951			129,397,951	

15. ADJUSTMENT TO FAIR VALUE OF DERIVATIVES

The following table summarizes the components of the adjustment to fair value of derivatives which were recorded as charges to results of operations for the years ended December 31, 2008 and 2007. The table summarizes by category of derivative liability the (increase) decrease in fair value from market changes during the years ended December 31, 2008 and 2007, the impact of additional investments and repricing and exercise of certain warrants.

	December 31, 2008	December 31, 2007
Embedded Pipe derivatives - 9.05	$ (195,140)	$ (795,772)
Pipe Hybrid instrument – 9.06	(937,712)	(5,808,165)
Pipe Hybrid- FAS 155 – 8.07	1,649,969	(374,039)
Pipe Hybrid- February 2008	351,897	-
Pipe Hybrid- April 2008	(504,144)	-
Original warrants PIPE 2005 , excluding replacement warrants	(234,392)	(891,167)
Replacement Warrants	(1,402,947)	(633,699)
Warrants – PIPE 2006-investors	(2,238,905)	(7,924,612)
Warrants – PIPE 2007-investors	(5,262,623)	(6,784,225)
Warrants – PIPE 2008-investors	(2,178,210)	-
Other Warrant Derivatives- 2005 and 2006	(1,805,990)	(7,182,045)
Other Warrants Derivatives - 2007	(324,050)	(1,598,056)
	$ (13,082,247)	$ (31,991,780)

16. STOCKHOLDERS' EQUITY TRANSACTIONS

The Company is authorized to issue two classes of capital stock, to be designated, respectively, Preferred Stock and Common Stock. The total number of shares of Preferred Stock the Company is authorized to issue is 50,000,000 par value $0.001 per share. The total number of shares of Common Stock the Company is authorized to issue is 500,000,000, par value $0.001 per share. The Company had no Preferred Stock outstanding as of December 31, 2008 and had 429,448,381 shares of Common Stock outstanding as of December 31, 2008.

Effective as of April 1, 2008, Jonathan F. Atzen, the Company’s Senior Vice President, General Counsel and Secretary, resigned from his positions with the Company and terminated his employment arrangement with the Company. Pursuant to the terms of an agreement between the Company and Mr. Atzen effective April 1, 2008, the Company agreed to (i) pay Mr. Atzen $48,333.33 in cash as a severance payment, (ii) issue a fully vested option to purchase an aggregate of 400,000 shares of common stock pursuant to the Company’s 2005 Stock Incentive Plan, as amended (the “2005 Plan”), (iii) issue an aggregate of 936,692 shares of the common stock pursuant to the 2005 Plan, (iv) provide for the vesting of all outstanding stock options held by Mr. Atzen and (v) provide Mr. Atzen and his family with full healthcare and dental coverage for a period of 6 months as was provided to Mr. Atzen during his employment.

Effective as of March 17, 2008, Ivan Wolkind, the Company's Senior Vice President—Finance, Administration & Chief Accounting Officer, resigned from all positions with the Company and voluntarily terminated his employment arrangement with the Company for personal reasons. On April 2, 2008, the Company entered into a Consulting Agreement with Mr. Wolkind. Pursuant to the Consulting Agreement, Mr. Wolkind agreed for a period of 90 days to provide up to 20 hours per week of financial consulting services to the Company including but not limited to (i) assisting with general accounting and investor diligence, (ii) commenting on the structure of proposed financial transactions, (iii) responding to queries regarding ACT's corporate structure, and (iv) reviewing strategic and financial documents as appropriate. As consideration for the services to be provided, the Company agreed to pay Mr. Wolkind an aggregate of $45,834 of which was paid on April 2, 2008. As additional consideration for the services to be provided, the Company agreed to issue to Mr. Wolkind 238,719 shares of common stock pursuant to the 2005 Plan. On May 2, 2008, the consulting contract was terminated with no future payments due.

Between September 29, 2008 and January 20, 2009, the Company was ordered by the Circuit Court of the Twelfth Judicial District Court for Sarasosa County, Florida to settle certain past due accounts payable, for previous professional services and other operating expenses incurred, by the issuance of shares of its common stock. In aggregate, as of January 30, 2009, the Company settled $1,108,673 in accounts payable through the issuance of 260,116,283 shares of its common stock. In 2008, the Company settled $603,474 in accounts payable through the issuance of 220,735,436 shares of its common stock. The Company recorded a loss on settlement of $5,436,137 in its accompanying statements of operations for the year ended December 31, 2008, which includes losses on settlement of $4,695,289 during the fourth quarter ended December 31, 2008. The losses were calculated as the difference between the amount of accounts payable relieved and the value of the shares (based on the closing share price on the settlement date) that were issued to relieve the accounts payable.

17. STOCK-BASED COMPENSATION

Stock Plans

On August 12, 2004, ACT’s Board of Directors approved the establishment of the 2004 Stock Option Plan (the “2004 Stock Plan”). Stockholder approval was received on December 13, 2004. The total number of common shares available for grant and issuance under the plan may not exceed 2,800,000 shares, subject to adjustment in the event of certain recapitalizations, reorganizations and similar transactions. Common stock purchase options may be exercisable by the payment of cash or by other means as authorized by the Board of Directors or a committee established by the Board of Directors. At December 31, 2008, ACT had granted 2,492,000 common share purchase options under the plan. At December 31, 2008, there were 308,000 options available for grant under this plan.

On December 13, 2004, ACT’s Board of Directors and stockholders approved the establishment of the 2004 Stock Option Plan II (the “2004 Stock Plan II”). The total number of common shares available for grant and issuance under the plan may not exceed 1,301,161 shares, subject to adjustment in the event of certain recapitalizations, reorganizations and similar transactions. Common stock purchase options may be exercisable by the payment of cash or by other means as authorized by the Board of Directors or a committee established by the Board of Directors. At December 31,

2008, ACT had granted 1,301,161 common share purchase options under the plan. At December 31, 2008, there were no options available for grant under this plan.

On January 31, 2005, the Company's Board of Directors approved the establishment of the 2005 Stock Incentive Plan (the "2005 Plan") for its employees, subject to approval of our shareholders. The total number of common shares available for grant and issuance under the plan may not exceed 9 million shares, plus an annual increase on the first day of each of the Company's fiscal years beginning in 2006 equal to 5% of the number of shares of our common stock outstanding on the last day of the immediately preceding fiscal year, subject to adjustment in the event of certain recapitalizations, reorganizations and similar transactions. On January 24, 2008, the Company's shareholders approved an increase of 25,000,000 shares to the 2005 Plan. Common stock purchase options may be exercisable by the payment of cash or by other means as authorized by the Board of Directors or a committee established by the Board of Directors. At December 31, 2008, we had granted 11,875,734 (net of forfeitures) common stock purchase options and 1,497,263 shares of common stock under the plan. At December 31, 2008, there were 15,722,589 options available for grant under this plan.

Stock Option Activity

A summary of option activity for the years ended December 31, 2008 and 2007 is presented below:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (000)
Outstanding, January 1, 2007	12,874,163	$ 0.71	8.20	$ 1,771
Granted	1,300,000	0.75		
Exercised	(340,000)	0.05		
Forfeited	(2,213,192)	0.83		
Outstanding, December 31, 2007	11,620,971	$ 0.78	7.16	$ 255
Granted	11,875,734	0.21		
Exercised	(1,200,000)	0.05		
Forfeited	(8,169,015)	0.53		
Outstanding, December 31, 2008	14,127,690	$ 0.51	7.71	$ -
Vested and expected to vest at December 31, 2008	13,359,485	0.52	7.64	-
Exercisable, December 31, 2008	8,218,418	$ 0.70	6.75	$ -

The aggregate intrinsic value in the table above is before applicable income taxes and is calculated based on the difference between the exercise price of the options and the quoted price of the Company's common stock as of the reporting date.

A summary of the status of unvested employee stock options as of December 31, 2008 and changes during the period then ended, is presented below:

	Shares	Weighted Average Grant Date Fair Value Per Share
Unvested at January 1, 2008	783,814	$ 0.46
Granted	11,875,734	0.21
Vested	(2,372,518)	0.39
Forfeited	(4,377,758)	0.26
Unvested at December 31, 2008	5,909,272	$ 0.24

As of December 31, 2008, total unrecognized stock-based compensation expense related to nonvested stock options was approximately $1,136,000, which is expected to be recognized over a weighted average period of approximately 9.06 years.

The following table summarizes information about stock options outstanding and exercisable at December 31, 2008.

	Options Outstanding			Options Exercisable	
Exercise Price	Number of Shares	Weighted Average Remaining Life (Years)	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
$0.05	922,000	5.62	$ 0.05	922,000	$ 0.05
0.21	7,440,000	9.11	0.21	1,667,586	0.21
0.25	1,301,161	6.00	0.25	1,301,161	0.25
0.35	65,000	7.53	0.35	39,271	0.35
0.75 - 0.76	20,000	7.82	0.75	10,837	0.75
0.85	3,197,112	6.09	0.85	3,173,779	0.85
1.35	235,000	7.31	1.35	205,782	1.35
2.04 - 2.11	295,000	6.99	2.07	251,352	2.07
2.20 - 2.48	652,417	6.65	2.34	646,650	2.34
	14,127,690			8,218,418	

18. COMMITMENTS AND CONTINGENCIES

The Company entered into a lease for office and laboratory space in Worcester, Massachusetts commencing December 2004 and expiring April 2010, and for office space in Los Angeles, California commencing November 2005 and expiring May 2008. The Company's rent at its Los Angeles, California site was on a month-to-month basis after May 2008. As discussed in Note 21, on March 1, 2009, the Company vacated its site in Los Angeles, California and moved to another site in Los Angeles. The term on this new lease is through February 28, 2010. Monthly base rent is $2,170. Annual minimum lease payments are as follows:

Year 1	$ 265,677
Year 2	89,910
Total	$ 355,587

Rent expense recorded in the financial statements for the year ended December 31, 2008 and 2007 was $2,183,126 and $1,485,218, respectively.

We have entered into employment contracts with certain executives and research personnel. The contracts provide for salaries, bonuses and stock option grants, along with other employee benefits. The employment contracts generally have no set term and can be terminated by either party. There is a provision for payments of three months to one year of annual salary as severance if we terminate a contract without cause, along with the acceleration of certain unvested stock option grants.

Effective as of April 1, 2008, Jonathan F. Atzen, the Company's Senior Vice President, General Counsel and Secretary, resigned from his positions with the Company and terminated his employment arrangement with the Company. Mr. Atzen had no disagreements with the Company, its Board of Directors or its management in any matter relating to the Company's operations, policies or practices.

Effective as of March 17, 2008, Ivan Wolkind, the Company's Senior Vice President—Finance, Administration & Chief Accounting Officer, resigned from all positions with the Company and voluntarily terminated his employment arrangement with the Company for personal reasons. Mr. Wolkind had no disagreements with the Company, its Board of Directors or its management in any matter relating to the Company's operations, policies or practices.

On May 26, 2008, Alan G. Walton, Ph., D.Sc. announced his resignation from the Board of Directors of the Company, effective immediately. Dr. Walton had no disagreements with the Company, its Board of Directors or its management in any matter relating to the Company's operations, policies or practices.

On May 31, 2008, the Company settled a dispute as a subtenant to its Alameda, California office for nonpayment of rent to its sublandlord. The sublease expired on May 31, 2008. As of that date, $445,000 of base rent, additional rent, and equipment payments, plus late fees and costs due under the sublease for a grand total of approximately $475,000 remained unpaid during the period from January 1, 2008 through May 31, 2008. On the date of the lease expiration, the Company vacated the premises but failed to remove the equipment that belonged to the Company. Consequently, the Company has agreed to assign all rights to the equipment to the sublandlord in partial settlement of amounts owed. Further, the Company has agreed to assign the sublandlord 62.5% of the Company's right, title, and interest in all royalties and 65% of subtenant's right, title, and interest in all other consideration payable to the Company under a license agreement with Embryome Sciences, Inc., dated July 10, 2008, until such time as the sublandlord has received royalty and other payments equal to $475,000, including the value of the equipment assigned to the sublandlord. Accordingly, the Company has recorded accrued rents relating to this matter in the amount of $389,400, which is the $475,000 settlement amount net of the withheld deposit of $27,000 and net of abandoned fixed assets of $58,600, in the accompanying consolidated balance sheet at December 31, 2008. As of June 30, 2009, the entire balance was unpaid.

On September 19, 2008, the Company was delivered judgment with respect to the landlord of its Charlestown, Massachusetts site over unpaid lease amounts. The Company failed to make its monthly lease payments after December 2007, which constituted an event of default under the lease agreement. Accordingly, the Company settled with the landlord in total of $1,751,543 for unpaid rent expenses, attorney fees, interest and damages for unpaid rent incurred through September 9, 2008. The Company abandoned its fixed assets at this site upon vacating the space, and recorded a loss on disposal of fixed assets amounting to $227,543 in its accompanying consolidated statement of operations during the year ended December 31, 2008. The Company accrued the remaining balance for the portion of damages incurred from January 1, 2008 through September 30, 2008 in accrued expenses its accompanying balance sheet at December 31, 2008, net of one payment of approximately $147,000. As of June 30, 2009, the Company had paid the entire amount under the judgment, plus approximately $104,000 in interest, and no longer has any obligations with respect to this judgment.

The Company and its subsidiary Mytogen, Inc. are currently defending themselves against a civil action brought in Suffolk Superior Court, No. 09-442-B, by their former landlord at 79/96 Thirteenth Street, Charlestown, Massachusetts, a property vacated by the Company and Mytogen effective May 31, 2008. In that action, Alexandria

Real Estate-79/96 Charlestown Navy Yard (“ARE”) is alleging that it has been unable to relet the premises and therefore seeking rent for the vacated premises since September 2008. Alexandria is also seeking certain clean-up and storage expenses. The Company is vigorously defending against the suit, claiming that ARE had breached certain convenants as of when Mytogen vacated, and that had ARE used reasonable diligence in its efforts to secure a new tenant, it would have been more successful. No trial date has been set. At this time, management cannot determine the likelihood of an unfavorable outcome from this lawsuit, and thus no amount has been accrued in its financial statements at December 31, 2008. If the Company does not prevail in these proceedings, losses for unpaid rents and other fees could be within a range between $3.5 million and $4.5 million.

Between April 1, 2008 and December 31, 2008, ACT issued 6,619,072 shares of common stock to several Holders of the 2005, 2006, 2007 and 2008 Debentures primarily for two reasons: (a) duplicate pre-redemption shares at the time of true-up and (b) negotiated shares with investors in settlement of various complaints from Debenture holders. The Company's policy is to expense the value of these shares to financing costs in the period the shares were issued or the costs were otherwise incurred. In 2008, the Company recorded $482,430 as financing costs associated with the issuance of these shares. At this time, the Company cannot determine potential legal ramifications arising from the issuance of these shares, and the Company has concluded that the likelihood of unfavorable ramifications from the issuance of these shares is remote and not estimable.

19. INCOME TAXES

The items accounting for the difference between income taxes computed at the federal statutory rate and the provision for income taxes were as follows:

	2008	2007
Statutory federal income tax rate	(34) %	(34) %
State income taxes, net of federal taxes	(6) %	(6) %
Non-includable items	8%	(19) %
Increase in valuation allowance	32%	59%
Effective income tax rate	-	-

Significant components of deferred tax assets and (liabilities) are as follows:

	2008	2007
Deferred tax assets:		(Restated)
Net operating loss carryforwards	$ 39,265,458	$ 25,312,676
Employee non-qualified stock options	1,008,424	797,000
Deferred interest and finance charges	43,000	43,000
Deferred revenue	1,250,210	-
Capitalized R&D costs	441,000	441,000
Valuation allowance	(42,008,092)	(26,593,676)
Net deferred tax asset	-	-

The Company files income tax returns in the U.S. federal jurisdiction, and various state jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local income tax examinations by tax authorities for years before 2001.

At December 31, 2008, the Company had federal and state net operating loss carry forwards available to offset future taxable income of approximately $95 million and $92 million respectively. These carry forwards will begin to expire in the years ending December 31, 2022 and December 31, 2012, respectively. These net operating losses are subject to various limitations on utilization based on ownership changes in the prior years under Internal Revenue Code Section 382. The Company is in the process of analyzing the impact of the ownership changes but management does not believe they will have a material impact on the Company's ability to utilize the net operating losses in the future.

The Company periodically evaluates the likelihood of the realization of deferred tax assets, and adjusts the carrying amount of the deferred tax assets by the valuation allowance to the extent the future realization of the deferred tax assets is not judged to be more likely than not. The Company considers many factors when assessing the likelihood of future realization of its deferred tax assets, including its recent cumulative earnings experience by taxing jurisdiction, expectations of future taxable income or loss, the carryforward periods available to the Company for tax reporting purposes, and other relevant factors.

At December 31, 2008, based on the weight of available evidence, including cumulative losses in recent years and expectations of future taxable income, the Company determined that it was more likely than not that its deferred tax assets would not be realized and have a $42.0 million valuation allowance associated with its deferred tax assets.

The Company adopted the provisions of FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes ("FIN 48"), on January 1, 2007. FIN 48 prescribes a recognition threshold that a tax position is required to meet before being recognized in the financial statements and provides guidance on recognition, measurement, classification, interest and penalties, accounting in interim periods, disclosure and transition issues.

As a result of the implementation of FIN 48, the Company reduced its net operating loss carryforward by $1,550,000. This reduction of the net operating loss carryforward translated into a reduction of the gross deferred tax asset of $658,500, with a corresponding reduction of the valuation allowance against that deferred tax asset. Due to the offsetting effect of the reduction of the valuation allowance, the adoption of FIN 48 had no impact on the Company's balance sheets or statements of operations.

The following table summarizes the activity related to its unrecognized tax benefits:

		Total
Balance at January 1, 2008	$	658,500
Increase related to prior period tax positions		-
Increase related to current year tax positions		-
Expiration of the statuts of limitations for the assessment of taxes		-
Other		-
Balance at December 31, 2008	$	658,500

The components of income tax expense are as follows:

		2008		2007
Current federal income tax	$	-	$	-
Current state income tax		-		-
Deferred taxes		15,414,416		9,192,476
Valuation allowance		(15,414,416)		(9,192,476)
	$	-	$	-

Future changes in the unrecognized tax benefit will have no impact on the effective tax rate due to the existence of the valuation allowance. The Company estimates that the unrecognized tax benefit will not change significantly within the next twelve months. The Company will continue to classify income tax penalties and interest as part of general and administrative expense in its consolidated statements of operations. There were no interest or penalties accrued as of December 31, 2008 or 2007.

The following table summarizes the open tax years for each major jurisdiction:

Jurisdiction	Open Tax Years
Federal	2001 - 2006
States	2001 - 2006

For tax years 2006 – 2008, the Company has not filed its state or federal tax returns; thus, the statute of limitations has not yet begun its term. As the Company has significant net operating loss carryforwards, even if certain of the Company's tax positions were disallowed, it is not foreseen that the Company would have to pay any taxes in the near future. Consequently, the Company does not calculate the impact of interest or penalties on amounts that might be disallowed.

20. RELATED PARTY TRANSACTIONS

As discussed in Note 7, Dr. Shapiro, one of the Company’s directors, may be deemed the beneficial owner of the securities owned by The Shapiro Family Trust. Refinanced bridge debt consisted of $70,000 in unsecured convertible notes previously issued and sold to The Shapiro Family Trust on March 21, 2008. The net outstanding amount of principal plus interest of the Notes was converted into the debt within the April 2008 debenture on a dollar-for-dollar basis.

Gary Rabin, a member of the Board of Directors may be deemed the beneficial owner of the securities owned by PDPI, LLC, in which he holds a partnership interest. Refinanced debt consisted of $60,000 in an unsecured note previously issued and sold to PDPI, LLC, and another $61,000 assumed by PDPI, LLC, and consisted of amounts owed by a third party which were rolled over into the April 2008 Debenture.

21. SUBSEQUENT EVENTS

As discussed in Note 16, between October 3, 2008 and January 20, 2009, the Company was ordered by the Circuit Court of the Twelfth Judicial District Circuit for Sarasosa County, Florida to settle certain past due accounts payable. The Company settled the accounts payable by the issuance of shares of its common stock, based on a formula that divides the amount due in dollars by the settlement date stock price, and multiplied by a specified factor. In January 2009, the Company settled the remaining $505,199 in accounts payable through the issuance of 39,380,847 shares of its common stock. The Company has recorded a loss on settlement of litigation in its consolidated statement of operations in the amount of $4,793,949 in the first quarter 2009.

On December 18, 2008, the Company entered into a license agreement with Transition for certain of its non-core technology. Under the agreement, Transition agreed to acquire a license to the technology for $3.5 million in cash. During 2008, the Company received approximately $2 million under this agreement. In January 2009, the Company received the remaining $1.5 million in cash under this agreement. The Company is recognizing revenue from this agreement over its 17-year patent useful life. The Company expects to apply the proceeds towards its retinal epithelium (“RPE”) cells program.

On March 1, 2009, the Company vacated a site in Los Angeles, California and moved to another site in Los Angeles. The lease term is through February 28, 2010. Monthly base rent is $2,170.

On March 5, 2009, the Company settled a lawsuit originally brought by Alpha Capital on February 11, 2009, who is an investor in the 2006, 2007, and 2008 debentures, and associated with the default on August 6, 2008 on all debentures. In settlement of the lawsuit, the Company agreed to reduce the conversion price on convertible debentures held by Alpha Capital to $0.02 per share, effective immediately, so long as the Company has a sufficient number of

authorized shares to honor the request for conversion.

On March 11, 2009, the Company entered into a $5 million credit facility ("Facility") with a life sciences fund. Under the agreement, the proceeds from the Facility must be used exclusively for the Company to file an investigational new drug ("IND") for its RPE program, and will allow the Company to complete both Phase I and Phase II studies in humans. An IND is required to commence clinical trials. Under the terms of the agreement, the Company may draw down funds, as needed for clinical development of the RPE program, from the investor through the issuance of Series A-1 convertible preferred stock. The preferred stock pays dividends, in kind of preferred stock, at an annual rate of 10%, matures in four years from the drawdown date, and is convertible into common stock at $0.75 per share. As of June 30, 2009, the Company has drawn down $1,505,000 on this credit facility. For providing investor relations services in connection with this credit facility, the Company issued a consultant 24,900,000 shares of its common stock on February 9, 2009. The Company valued the issuance of these shares at $4,731,000 based on a closing price of $0.19 on February 9, 2009 and recorded the value of the shares as deferred financing costs associated with the financing on the date they were issued.

CHA Bio & Diostech Co., Ltd.

On March 30, 2009, the Company entered into a second license agreement with CHA under which the Company will license its RPE technology, for the treatment of diseases of the eye, to CHA for development and commercialization exclusively in Korea. The Company is eligible to receive up to a total of $1.9 million in fees based upon the parties achieving certain milestones, including the Company making an IND submission to the US FDA to commence clinical trials in humans using the technology. The Company received an up-front fee under the license in the amount of $1,000,000. Under the agreement, CHA will incur all of the costs associated with the RPA clinical trials in Korea.

On May 13, 2009, the Company entered into a third license agreement with CHA under which the Company will license its proprietary "single blastomere technology," which has the potential to generate stable cell lines, including RPE for the treatment of diseases of the eye, for development and commercialization exclusively in Korea. The Company received an upfront license fee of $300,000.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a)(1) Financial Statements

The exhibits required by this item and included in this report or incorporated herein by reference are as follows:

EXHIBIT INDEX

Exhibit Number	Description
2.1	Agreement and Plan of Merger between the Company, A.C.T. Acquisition Corp. and ACT, dated as of January 3, 2005 (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on January 4, 2005 (File No. 000-50295) and incorporated by reference herein).
2.2	Agreement and Plan of Merger between Advanced Cell Technology, Inc., a Nevada corporation, and Advanced Cell Technology, Inc., a Delaware corporation, dated as of November 18, 2005 (previously filed as Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed on November 21, 2005 (File No. 000-50295) and incorporated by reference herein).
2.2	Agreement and Plan of Merger between Advanced Cell Technology, Inc., a Delaware corporation, and ACT, dated as of November 18, 2005 (previously filed as Exhibit 2.2 to the Registrant's Current Report on Form 8-K filed on November 21, 2005 (File No. 000-50295) and incorporated by reference herein).
3.1	Certificate of Incorporation of the Company (previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on November 21, 2005 (File No. 000-50295) and incorporation by reference herein).
3.1.1	Certificate of Amendment to Articles of Incorporation dated April 1, 2004 (previously filed as Exhibit 3.1.1 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
3.1.2	Certificate of Amendment to Articles of Incorporation dated December 30, 2004 (previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on January 4, 2005 (File No. 000-50295) and incorporated by reference herein).
3.1.3	Certificate of Amendment to Articles of Incorporation dated June 23, 2005 (previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on June 22, 2005 (File No. 000-50295) and incorporated by reference herein).

3.1.4	Certificate of Amendment to Articles of Incorporation dated July 6, 2005 (previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on July 7, 2005 (File No. 000-50295) and incorporated by reference herein).
3.2	Bylaws of the Company (previously filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed on November 21, 2005 (File No. 000-50295) and incorporated by reference herein).
3.2.1	Amendment to Bylaws of the Company (previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on December 29, 2004 (File No. 000-50295) and incorporated by reference herein).
4.1	Specimen Stock Certificate (previously filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on November 21, 2005 (File No. 000-50295) and incorporated by reference herein).
4.2	Form of $0.05 Warrant to Purchase Common Stock of ACT. ACT issued warrants in this form for the purchase of an aggregate of 900,000 shares, including a warrant to purchase 250,000 shares of ACT common stock to Andwell, LLC, an entity affiliated with William Caldwell, IV, the Chief Executive Officer and a director of the Company (previously filed as Exhibit 4.2 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
4.3	Form of $0.25 Warrant to Purchase Common Stock of ACT. ACT issued warrants in this form for the purchase of an aggregate of 1,954,000 shares, including (i) a warrant to purchase 236,000 shares of ACT common stock to Andwell, LLC, an entity affiliated with William Caldwell, IV, the Chief Executive Officer and a director of the Company, (ii) a warrant to purchase 75,000 shares of ACT common stock to Rocket Ventures, an entity affiliated with Jonathan Atzen, a Senior Vice President and the General Counsel of the Company (previously filed as Exhibit 4.3 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
4.4	$0.25 Warrant to Purchase Common Stock of the Company issued to Gunnar Engstrom (previously filed as Exhibit 4.4 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
4.5	Form of $0.85 Warrant to Purchase Common Stock of ACT (previously filed as Exhibit 4.5 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
4.6	Form of $1.27 Warrant to Purchase Common Stock of ACT (previously filed as Exhibit 4.6 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
4.7	Form of $2.00 Warrant to Purchase Common Stock of ACT (previously filed as Exhibit 4.7 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
4.8	Form of Subscription Agreement to Purchase Series A Convertible Preferred Units of ACT (previously filed as Exhibit 4.8 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).

4.9	Form of Share Purchase Agreement to purchase common stock of Two Moons Kachinas Corp. ("TMOO"), the predecessor to the Company (previously filed as Exhibit 4.9 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
4.10	Form of Lock-Up Agreement entered into by certain sellers of TMOO common stock (previously filed as Exhibit 4.10 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
4.11	Form of Lock-Up Agreement entered into by certain buyers of TMOO common stock (previously filed as Exhibit 4.11 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
4.12	Investor's Rights Agreement between ACT and Avian Farms, Inc. dated December 31, 1998 (previously filed as Exhibit 4.12 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
9.1	Form of Voting Agreement for shares of common stock of ACT held by certain parties effective as of January 31, 2005 (previously filed as Exhibit 9.1 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000- 50295) and incorporated by reference herein).
10.1	Exclusive Development and License Agreement between GTC Biotherapeutics (f/k/a as Genzyme Transgenics Corporation) and ACT dated June 8, 1999 (previously filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000- 50295) and incorporated by reference herein).

10.2	Exclusive License Agreement dated April 16, 1996 between the University of Massachusetts and ACT as amended on September 1, 1997, May 31, 2000 and September 19, 2002 (previously filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.3	Materials and Research Data License Agreement dated January 26, 2001 between Wake Forest University and ACT (previously filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.3.1	July 1, 2002 Assignment to Wake Forest University Health Sciences (previously filed as Exhibit 10.3.1 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.4	Exclusive License Agreement dated February 1, 2002 between the University of Massachusetts and ACT (previously filed as Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.5	Non-Exclusive Sublicense Agreement between ACT and Infigen, Inc. dated August 1, 2003 (previously filed as Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.6	Non-Exclusive License Agreements, dated January 1, 2001 between ACT and PPL Therapeutics (Scotland) Limited (previously filed as Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.7	Nonexclusive License Agreement dated May 1, 2001 between ACT and Immerge BioTherapeutics, Inc. (previously filed as Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.8	Nonexclusive License and Sponsored Research Agreement dated June 29, 2001 between ACT and Charles River Laboratories, Inc. (previously filed as Exhibit 10.8 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.9	Non-Exclusive Sublicense Agreement between Cyagra, Inc., ACT, ACT Group and Goyaike, S.A. dated November 20, 2001 (previously filed as Exhibit 10.9 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.10	Exclusive Sublicense Agreement between ACT, ACT Group and Cyagra, Inc. dated June 28, 2002 (previously filed as Exhibit 10.10 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.11	Non-Exclusive License Agreement dated November 8, 2002 between ACT and Merial Limited (previously filed as Exhibit 10.11 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.12	Non-Exclusive Sublicense Agreement between ACT and Infigen, Inc. dated August 1, 2003 (previously filed as Exhibit 10.12 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).

10.13	Exclusive License Agreement dated October 22, 2003 between ACT and Exeter Life Sciences, Inc. (previously filed as Exhibit 10.13 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.13.1	Letter of Intent between ELS and ACT dated March 16, 2003 (previously filed as Exhibit 10.13.1 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).

10.13.2	Sponsored Research Agreement (previously filed as Exhibit 10.13.2 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.14	Non-Exclusive License Agreement dated January 4, 2002 between ACT and Genetic Savings & Clone (previously filed as Exhibit 10.14 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.15	Non-Exclusive License Agreement dated February 3, 2004 between ACT and Pureline Genetics (previously filed as Exhibit 10.15 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.16	Non-Exclusive License Agreement dated February 3, 2004 between ACT and First Degree Genetics (previously filed as Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.17	Non-Exclusive License Agreement dated February 3, 2004 between ACT and One Degree Genetics (previously filed as Exhibit 10.17 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.18	Option to License Intellectual Property dated December 31, 2003 between ACT and PacGen Cellco, LLC (previously filed as Exhibit 10.18 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.18.1	First Amendment to Option to License Intellectual Property dated February 13, 2004 (previously filed as Exhibit 10.18.1 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.19	Exclusive License Agreement (Infigen IP) dated May 14, 2004 between ACT and PacGen Cellco, LLC (previously filed as Exhibit 10.19 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.19.1	First Amendment to Exclusive License Agreement (Infigen IP) dated August 25, 2005.
10.20	Exclusive License Agreement (UMass IP) dated May 14, 2004 between ACT and PacGen Cellco, LLC (previously filed as Exhibit 10.20 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.20.1	First Amendment to Exclusive License Agreement (UMass IP) dated August 25, 2005, previously filed and incorporated by reference herein.
10.21	Exclusive License Agreement (ACT IP) dated May 14, 2004 between ACT and PacGen Cellco, LLC (previously filed as Exhibit 10.21 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.21.1	First Amendment to Exclusive License Agreement (ACT IP) dated August 25, 2005, previously filed and incorporated by reference herein.
10.22	

	Agreement to Amend ACT/CELLCO License Agreements dated September 7, 2004 ACT and PacGen Cellco, LLC (previously filed as Exhibit 10.22 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.23	Indemnification Agreement of David Merrell to certain buyers of TMOO common stock dated December 31, 2004 (previously filed as Exhibit 10.23 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.24	Convertible Promissory Note to ACT Group, Inc. dated July 12, 2002 in the amount of $1,000,000 (previously filed as Exhibit 10.24 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).

10.25	Promissory Note issued by ACT to Pierce Atwood LLP dated January 2005 in the amount of $150,000 (previously filed as Exhibit 10.25 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.26	Promissory Note issued by ACT to Pierce Atwood dated July 1, 2003 in the amount of $339,000 (previously filed as Exhibit 10.26 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.27	Promissory Note issued by ACT to Rothwell, Figg, Ernst & Manbeck, P.C. dated July 8, 2003 in the amount of $272,108 (previously filed as Exhibit 10.27 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.28	Forbearance and Stock Purchase Agreement Among Avian Farms, Inc., ACT Group, Inc., ACT and Cima Biotechnology, Inc., dated July 16, 1999, as amended December 23, 1999 (previously filed as Exhibit 10.28 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.29	Securityholders' Agreement among ACT, ACT Group, Cyagra, Inc. and Goyaike S.A. dated November 20, 2001 (previously filed as Exhibit 10.29 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.30.1	Securityholders' Agreement among ACT, ACT Group, Cyagra, Inc. and Goyaike S.A. dated July 1, 2002 (previously filed as Exhibit 10.30.1 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.30.2	Collaboration Agreement and Technology License (previously filed as Exhibit 10.30.2 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.30.3	Separation Agreement among ACT, ACT Group, Cyagra, Inc. and Goyaike S.A. (previously filed as Exhibit 10.30.3 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.31	Membership Interest Exchange and Asset Sale Agreement dated May 31, 2000, by and among ACT and Hematech, LLC, et al. (previously filed as Exhibit 10.31 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.31.1	Buyout Option Agreement dated May 31, 2000 between Hematech, LLC and ACT (previously filed as Exhibit 10.31.1 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.32	Space Sublease Agreement dated November, 2004, between BioReliance and ACT, for 381 Plantation Street, Worcester, MA 01605 (previously filed as Exhibit 10.32 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.33	Advanced Cell Technology, Inc. 2004 Stock Option Plan. Pursuant to this option plan, ACT issued options to purchase an aggregate 2,604,000 shares, including (i) options to purchase 1,500,000 shares of ACT common stock to Michael West, the Chairman of the Board of Directors and the Chief Scientific Officer of the Company, and (ii) options to purchase 750,000 shares of ACT common stock

	to Robert Lanza, the Vice President of Medical and Scientific Development of the Company (previously filed as Exhibit 10.33 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000- 50295) and incorporated by reference herein).
10.34	Advanced Cell Technology, Inc. 2004 Stock Option Plan II. Pursuant to this option plan, ACT issued options to purchase an aggregate 1,301,161 shares, including (i) options to purchase 651,161 shares of ACT common stock to William Caldwell, IV, the Chief Executive Officer and a director of the Company, and (ii) options to purchase 240,000 shares of ACT common stock to Robert Peabody, a director of the Company (previously filed as Exhibit 10.34 to the Registrant's Quarterly Report on Form 10- QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.35	A.C.T. Holdings, Inc. 2005 Stock Option Plan (previously filed as Appendix A to the Registrant's preliminary proxy statement on Form PRE-14A filed on May 10, 2005 (File No. 000-50295) and incorporated by reference herein).
10.36	Form of Incentive Stock Option Agreement (previously filed as Exhibit 10.36 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).

10.37	Form of Nonqualified Stock Option Agreement (previously filed as Exhibit 10.37 to the Registrant's Quarterly Report on Form 10- QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.38	Employment Agreement between ACT and William M. Caldwell, IV dated December 31, 2004 (previously filed as Exhibit 10.38 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.39	Employment Agreement between ACT and Michael D. West dated December 31, 2004 (previously filed as Exhibit 10.39 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.39.1	Amendment No. 1 to Employment Agreement between ACT and Michael D. West dated August 1, 2005 (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on August 5, 2005 (File No. 000-50295) and incorporated by reference herein).
10.40	Employment Agreement between ACT and Robert Lanza dated February 1, 2005 (previously filed as Exhibit 10.40 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.41	Employment Agreement between the Registrant, ACT and James G. Stewart dated March 13, 2005 (previously filed as Exhibit 10.41 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.41.1	Amendment to Employment Agreement between the Registrant and James G. Stewart dated September 16, 2005 (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on September 22, 2005 (File No. 000-50295) and incorporated by reference herein).
10.42	Employment Agreement between ACT and Robert Peabody dated February 9, 2005 (previously filed as Exhibit 10.42 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.43	Employment Agreement between ACT and Jonathan Atzen dated April 1, 2005 (previously filed as Exhibit 10.43 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.44	Employment Agreement between ACT and Irina Klimanskaya dated October 1, 2003 (previously filed as Exhibit 10.44 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.45	Employment Agreement between ACT and Sadhana Agarwal dated April 1, 2004 (previously filed as Exhibit 10.45 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.46	Employment Agreement between ACT and James Murai dated February 17, 2005 (previously filed as Exhibit 10.46 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.47	

	Employment Agreement between ACT and David Larocca dated February 9, 2005 (previously filed as Exhibit 10.47 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.48	Consulting Agreement between ACT and William M. Caldwell, IV dated October 1, 2004 (previously filed as Exhibit 10.48 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.49	Consulting Agreement between ACT and Jonathan Atzen dated January 14, 2005 (previously filed as Exhibit 10.49 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.50	Consulting Agreement between ACT and Stephen Price dated December 31, 2004 (previously filed as Exhibit 10.50 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).

10.50.1	Consulting Agreement between ACT and Stephen Price dated April 28, 2005 (previously filed as Exhibit 10.50.1 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.51	Consulting Agreement between ACT and Chad Griffin dated April 1, 2005 (previously filed as Exhibit 10.51 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.52	Consulting Agreement between ACT and James Stewart dated January 14, 2005 (previously filed as Exhibit 10.52 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.53	Settlement Agreement between ACT and Gunnar Engstrom dated January 28, 2005 (previously filed as Exhibit 10.53 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.54	Confidentiality and Nondisclosure Agreement dated February 3, 1999 between ACT and Robert Lanza, M.D. (previously filed as Exhibit 10.54 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.55	Consulting Agreement dated September 29, 1997 between ACT and Dr. James Robl (previously filed as Exhibit 10.55 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.56	Consulting Agreement dated January 23, 1998 between ACT and Dr. James Robl (previously filed as Exhibit 10.56 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.57	Final Settlement Agreement dated August 6, 1999 between Infigen, Inc., ACT and Steven Stice (previously filed as Exhibit 10.57 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.58	Letter Agreement dated April 20, 2000 between ACT and Dr. Steven L. Stice (previously filed as Exhibit 10.58 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.59	Master Laboratory Services Agreement dated as of January 4, 2001 between White Eagle Laboratories, Inc. and ACT (previously filed as Exhibit 10.59 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.60	Master Study Agreement dated as of December 4, 2000 between Biomedical Research Models, Inc. and ACT (previously filed as Exhibit 10.60 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.61	Agreement Relating to the Transfer of Biological Materials dated as of February 3, 2000 between Wake Forest University and ACT (previously filed as Exhibit 10.61 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).

10.62	Materials Transfer Agreement dated February 16, 2000 between ACT, B.C. Cancer Agency and Dr. Peter Lansdorp (previously filed as Exhibit 10.62 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.63	Materials Transfer Agreement dated January 19, 2000 between ACT, IPK and Anna Wobus (previously filed as Exhibit 10.63 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.64	Materials Transfer Agreement dated February 23, 2000 between ACT, Philip Damiani and Carlos T. Moraes (previously filed as Exhibit 10.64 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.65	Material Transfer Agreement dated January 6, 1997 between ACT, University of Massachusetts, University of Colorado and Curtis R. Freed (previously filed as Exhibit 10.65 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000- 50295) and incorporated by reference herein).

10.66	Material Transfer Agreement dated March 20, 2000 between ACT, Charlotte Farin and Peter Farin (previously filed as Exhibit 10.66 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.67	Sponsored Research Agreement dated as of May 15, 2000 between Carl H. Lindner, Jr. Family Center for Research of Endangered Wildlife (CREW) and ACT (previously filed as Exhibit 10.67 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.68	Sponsored Research Agreement dated as of August 9, 2000 between Cornell University and ACT (previously filed as Exhibit 10.68 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.69	Sponsored Research Agreement dated as of December 1, 1999 between ACT and the University of Massachusetts Amherst (previously filed as Exhibit 10.69 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.69.1	Amendment No. 1 to Agreement dated December 1, 1999 (previously filed as Exhibit 10.69.1 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.70	Sponsored Research Agreement dated August 1, 1999 between ACT and UMass (D. Good) (previously filed as Exhibit 10.70 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.71	Term Sheet for Non-Exclusive License Agreement dated as of December 23, 2000 between Immerge BioTherapeutics, Inc. and ACT, as amended by First Amendment to Term Sheet dated March 14, 2001 (previously filed as Exhibit 10.71 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.72	Withdrawal, Termination, Assignment and Assumption Agreement dated March 14, 2001 by and among ACT, BioTransplant, Inc., Immerge BioTherapeutics, Inc. and Infigen, Inc. (previously filed as Exhibit 10.72 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.73	Consulting Agreement between ACT and Karen Chapman dated January 15, 2005 (previously filed as Exhibit 10.73 to the Registrant's Quarterly Report on Form 10-QSB filed on May 23, 2005 (File No. 000-50295) and incorporated by reference herein).
10.74	Research Collaboration Agreement between ACT and The Burnham Institute dated May 23, 2005 (previously filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-QSB filed on August 15, 2005 (File No. 000-50295) and incorporated by reference herein).
10.75	Securities Purchase Agreement dated September 15, 2005 (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on September 19, 2005 (File No. 000-50295) and incorporated by reference herein).
10.76	Registration Rights Agreement dated September 15, 2005 (previously filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on September 19, 2005 (File No. 000-50295) and

	incorporated by reference herein).
10.77	Form of Common Stock Purchase Warrant (previously filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on September 19, 2005 (File No. 000-50295) and incorporated by reference herein).
10.78	Form of Amortizing Convertible Debenture (previously filed as Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed on September 19, 2005 (File No. 000-50295) and incorporated by reference herein).
10.79	Form of Lock-up Agreement (previously filed as Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed on September 19, 2005 (File No. 000-50295) and incorporated by reference herein).
10.80	Settlement Agreement dated September 14, 2005 (previously filed as Exhibit 10.6 to the Registrant's Current Report on Form 8-K filed on September 19, 2005 (File No. 000-50295) and incorporated by reference herein).
10.81	Form of Convertible Promissory Note (Unsecured) (previously filed as Exhibit 10.7 to the Registrant's Current Report on Form 8- K filed on September 19, 2005 (File No. 000-50295) and incorporated by reference herein).

10.82	Form of Warrant to Purchase Securities (previously filed as Exhibit 10.8 to the Registrant's Current Report on Form 8-K filed on September 19, 2005 (File No. 000-50295) and incorporated by reference herein).
10.83	Agreement between Advanced Cell Technology, Inc., Advanced Cell, Inc. and A.C.T. Group, Inc. dated September 15, 2005 (previously filed as Exhibit 10.9 to the Registrant's Current Report on Form 8-K filed on September 19, 2005 (File No. 000-50295) and incorporated by reference herein).
10.84	Agreement between Capital Financial Media, LLC and Advanced Cell Technology, Inc., dated February 9, 2006 (previously filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-QSB filed on May 15, 2006 (File No. 000-50295) and incorporated by reference herein).
10.85	Sublease Agreement between Avigen, Inc. and Advanced Cell Technology, Inc., dated November 29, 2005. (previously filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-QSB filed on May 15, 2006 (File No. 000-50295) and incorporated by reference herein).
10.86	Exclusive Sublicense Agreement between Advanced Cell Technology, Inc. and TranXenoGen, Inc., dated March 29, 2006 (previously filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-QSB filed on May 15, 2006 (File No. 000-50295) and incorporated by reference herein).
10.87	Non-Exclusive License Agreement between Kirin Beer Kabushiki Kaisha, Aurox, LLC, Hematech, LLC, and Kirin SD, Inc., and Advanced Cell Technology, Inc., dated May 9, 2006 (previously filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-QSB filed on August 11, 2006 (File No. 000-50295) and incorporated by reference herein).
10.88	Exclusive License Agreement between Kirin Beer Kabushiki Kaisha, Aurox, LLC, Hematech, LLC, and Kirin SD, Inc., and Advanced Cell Technology, Inc., dated May 9, 2006 (previously filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-QSB filed on August 11, 2006 (File No. 000-50295) and incorporated by reference herein).
10.89	Purchase Agreement between Kirin SD, Inc. and Advanced Cell Technology, Inc., dated May 9, 2006(previously filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-QSB filed on August 11, 2006 (File No. 000-50295) and incorporated by reference herein).
10.90	Consulting Agreement between Advanced Cell Technology, Inc. and James G. Stewart, dated August 17, 2006 (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on August 18, 2006 (File No. 000-50295) and incorporated by reference herein).
10.91	Securities Purchase Agreement dated August 30, 2006 (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on September 8, 2006 (File No. 000-50295) and incorporated by reference herein).
10.92	Registration Rights Agreement dated September 15, 2005 (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on September 8, 2006 (File No. 000-50295) and incorporated by reference herein).
10.93	Form of Common Stock Purchase Warrant (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on September 8, 2006 (File No. 000-50295) and incorporated by reference herein).

10.94	Form of Amortizing Convertible Debenture (previously filed as Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed on September 8, 2006 (File No. 000-50295) and incorporated by reference herein).
10.95	Form of Lock-up Agreement (previously filed as Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed on September 8, 2006 (File No. 000-50295) and incorporated by reference herein).
10.96	Amendment No. 1, dated as of January 11, 2007, to the Securities Purchase Agreement, dated August 30, 2006, the Amortizing Convertible Debenture, dated September 6, 2006, and the Registration Rights Agreement, dated August 30, 2006 (previously filed as Exhibit 10.97 to the Registrant's Registration Statement on Form SB-2 filed on January 26, 2007 (File No. 333-140265) and incorporated by reference herein).
10.97	Amendment No. 1, dated as of January 11, 2007, to the Securities Purchase Agreement, the Amortizing Convertible Debenture, and the Registration Rights Agreement, each dated August 30, 2006 (previously filed as Exhibit 10.97 to the Registrant's Registration Statement on Form SB-2 filed on January 26, 2007 (File No. 333-140265) and incorporated by reference herein).
10.98	Patent Assignment Agreement between Advanced Cell Technology, Inc. and Infigen, Inc., dated February 5, 2007 (previously filed as Exhibit 10.98 to the Registrant's Post-Effective Amendment No. 3 to its Registration Statement on Form SB-2 filed on March 28, 2007 and incorporated by reference herein).

10.99	Employment Agreement between Advanced Cell Technology, Inc. and Pedro Huertas, M.D., Ph.D., dated February 5, 2007 (previously filed as Exhibit 10.99 to the Registrant's Post-Effective Amendment No. 3 to its Registration Statement on Form SB-2 filed on March 28, 2007 and incorporated by reference herein).
10.100	Research Services Agreement between Advanced Cell Technology, Inc. and Oregon Health & Science University, dated February 5, 2007 (previously filed as Exhibit 10.100 to the Registrant's Post-Effective Amendment No. 3 to its Registration Statement on Form SB-2 filed on March 28, 2007 and incorporated by reference herein).
10.101	Agreement and Plan of Merger by and among Advanced Cell technology, Inc., ACT Acquisition Sub, Inc., Mytogen, Inc. and certain shareholders of Mytogen, Inc., dated as of July 31, 2007 (previously filed as exhibit 10.101 to the Amendment No. 1 to the Registrant's 10-KSB for the year ended December 31, 2007 filed with the SEC on June 30, 2008 and incorporated by reference herein).
10.102	Escrow Agreement by and among Advanced Cell Technology, Inc. and certain former shareholders of Mytogen, Inc., dated as of September 20, 2007 (previously filed as exhibit 10.102 to the Amendment No. 1 to the Registrant's 10-KSB for the year ended December 31, 2007 filed with the SEC on June 30, 2008 and incorporated by reference herein)
10.103	Securities Purchase Agreement dated August 31, 2007 (previously filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on September 7, 2007 (File No. 000-50295) and incorporated by reference herein).
10.104	Registration Rights Agreement dated August 31, 2007 (previously filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on September 7, 2007 (File No. 000-50295) and incorporated by reference herein).
10.105	Form of Common Stock Purchase Warrant (previously filed as Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on September 7, 2007 (File No. 000-50295) and incorporated by reference herein).
10.106	Form of Amortizing Convertible Debenture (previously filed as Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed on September 7, 2007 (File No. 000-50295) and incorporated by reference herein).
10.107	Form of Security Agreement dated August 31, 2007 (previously filed as Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed on September 7, 2007 (File No. 000-50295) and incorporated by reference herein).
10.108	Form of Subsidiary Guaranty dated August 31, 2007 (previously filed as Exhibit 10.6 to the Registrant's Current Report on Form 8-K filed on September 7, 2007 (File No. 000-50295) and incorporated by reference herein).
10.109	Form of Lock-up Agreement (previously filed as Exhibit 10.7 to the Registrant's Current Report on Form 8-K filed on September 7, 2007 (File No. 000-50295) and incorporated by reference herein).
10.110	Amended and Restated Consulting Agreement, dated as of September 19, 2007 by and between Advanced Cell Technology, Inc., through its wholly owned subsidiary Mytogen, Inc., and Dib, LLC.

	(previously filed as Exhibit 10.110 to the Registrant's Registration Statement on Form SB-2 filed on October 1, 2007 and incorporated by reference herein).
10.111	Employment Agreement, dated as of September 20, 2007, by and between Advanced Cell technology, Inc., and Jonathan Dinsmore. (previously filed as Exhibit 10.111 to the Registrant's Registration Statement on Form SB-2 filed on October 1, 2007 and incorporated by reference herein).
10.112	Nomination Agreement, dated September 20, 2007, by and between Advanced Cell Technology, Inc. and Anthem Ventures Fund, LP. (previously filed as Exhibit 10.112 to the Registrant's Registration Statement on Form SB-2 filed on October 1, 2007 and incorporated by reference herein).
10.113	Securities Purchase Agreement dated March 31, 2008, by and among the Company and the investors party thereto (previously filed as Exhibit 10.1 to the Registrant’s Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference).
10.114	Security Agreement dated March 31, 2008, by and among the Company and the investors party thereto (previously filed as Exhibit 10.2 to the Registrant’s Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference).
10.115	Form of Common Stock Purchase Warrant issued in connection with March 31, 2008 Securities Purchase Agreement (previously filed as Exhibit 10.3 to the Registrant’s Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference).

10.116	Form of Amortizing Convertible Debenture issued in connection with March 31, 2008 Securities Purchase Agreement (previously filed as Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference).
10.117	Subsidiary Guarantee dated March 31, 2008 (previously filed as Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference).
10.118	Convertible Note, dated as of March 17, 2008, issued by the Company to PDPI LLC (previously filed as Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference).
10.119	Bridge Note, dated as of March 17, 2008, issued by the Company to The Shapiro Family Trust Dated September 25, 1989 (previously filed as Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference).
10.120	License Agreement, dated as of February 25, 2008, by and between the Company and Pharming Technologies B.V (previously filed as Exhibit 10.8 to the Registrant's Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference).
10.121	Convertible Promissory Note A, dated as of February 15, 2008, issued by the Company to JMJ Financial (previously filed as Exhibit 10.9 to the Registrant's Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference).
10.122	Convertible Promissory Note B , dated as of February 15, 2008, issued by the Company to JMJ Financial, and Amendment to Convertible Promissory Note B, dated as of March 17, 2008 (previously filed as Exhibit 10.10 to the Registrant's Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference).
10.123	Secured & Collateralized Promissory Note, dated as of February 15, 2008, issued by JMJ Financial to the Company (previously filed as Exhibit 10.11 to the Registrant's Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference).
10.124	Collateral & Security Agreement, dated as of February 15, 2008, by and between the Company and JMJ Financial (previously filed as Exhibit 10.12 to the Registrant's Quarterly Report on Form 10-Q filed on July 15, 2008 and incorporated herein by reference).
10.125	Exclusive License and Partnering Agreement, dated July 9, 2008, between the Company and Embryome Sciences, Inc.*
10.126	Exclusive License Agreement, dated as of November 30, 2008, between CHA Biotech Co., Ltd. and Allied Cell Technologies, Inc.*
10.127	Exclusive License Agreement, dated as of December 18, 2008, between the Company and Transition Holdings, Inc.*
10.128	Exclusive License Agreement, dated as of March 30, 2009, between the Company and CHA Biotech Co., Ltd.*
10.129	

	Exclusive License Agreement, dated as of May 8, 2009, between the Company and CHA Biotech Co., Ltd.*
10.130	Allied Cell Technologies, Inc. Common Stock Purchase Agreement, dated November 30, 2008, between the Company and Allied Cell Technologies, Inc.*
14.1	Code of Ethics for Designated Senior Financial Managers (previously filed as Exhibit 14.1 to the Registrant's Current Report on Form 8-K filed on August 5, 2005 (File No. 000-50295) and incorporated by reference herein).
14.2	Code of Business Conduct and Ethics (previously filed as Exhibit 14.2 to the Registrant's Current Report on Form 8-K filed on August 5, 2005 (File No. 000-50295) and incorporated by reference herein).
16.1	Copy of letter from Stonefield Josephson, Inc. to the Securities and Exchange Commission, dated April 20, 2007 (previously filed as Exhibit 16.1 to the Registrant's Current Report on Form 8-K filed on April 20, 2007 (File No. 000-50295) and incorporated by reference herein).
23.1	Consent of Independent Registered Public Accounting Firm*
31.1	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
31.2	Certification of the Principle Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*
32.1	Certification of Chief Executive Officer and Principle Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*

* Filed herewith.

In accordance with Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant has caused this report to be signed on this 5th day of August 2009, on its behalf by the undersigned, thereunto duly authorized.

ADVANCED CELL TECHNOLOGY, INC.

By /s/ William M. Caldwell, IV
William M. Caldwell, IV
Chief Executive Officer (Principal Executive Officer and Principle Financial Officer)

Pursuant to the requirements of the Securities Act of 1934, this Amendment to its Annual Report on Form 10-K has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

/s/ William M. Caldwell, IV William M. Caldwell, IV Chief Executive Officer (Principal Executive Officer and Principle Financial Officer) Chairman of the Board of Directors	August 5, 2009
/s/ Erkki Ruoslahti, M.D., Ph.D. Erkki Ruoslahti, M.D., Ph.D., Director	August 5, 2009
/s/ Gary Rabin Gary Rabin, Director	August 5, 2009
/s/ Alan C. Shapiro Alan C. Shapiro, Director	August 5, 2009