ADVANCED CELL TECHNOLOGY, INC.

Form SB-2/A April 06, 2007

As filed with the Securities and Exchange Commission on April 6, 2007

Registration No. 333-140265

# **UNITED STATES**

# SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549 AMENDMENT NO. 1 TO REGISTRATION STATEMENT ON

# FORM SB-2

UNDER
THE SECURITIES ACT OF 1933

# ADVANCED CELL TECHNOLOGY, INC.

(Name of small business issuer in its charter)

#### Delaware

(State or Jurisdiction of Incorporation or organization)

#### 2834

(Primary Standard Industrial Classification Code Number)

#### 87-0656515

(I.R.S. Employer Identification Number)

1201 Harbor Bay Parkway Alameda, CA 94502 (510) 748-4900

(Address and telephone number of principal executive offices)

William M. Caldwell, IV, Chief Executive Officer Advanced Cell Technology, Inc. 1201 Harbor Bay Parkway Alameda, CA 94502 (510) 748-4900

(Name, address and telephone number of agent for service)

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Approximate date of commencement of proposed sale to the public: From time to time after the effective date of the registration statement, as determined by the Registrant.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. o

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box x.

#### CALCULATION OF REGISTRATION FEE

	Number of	<b>Proposed Maximum</b>	Proposed Maximum	
Title of Each Class of	Shares To Be	Offering Price	Aggregate	Amount of
Securities To Be Registered	Registered	Per Share	Offering Price	Registration Fee
Common Stock, \$0.001 par value per share	13,516,367 (1)	\$ 0.88 (2)	\$ 11,894,402 (2)	\$ 1,272.70
Common Stock, \$0.001 par value per share	20,397,296 (3)	\$ 2.08 (4)	\$ 42,426,375 (4)	\$ 4,539.62 (5)
Total Registration Fee				\$ 5,812.32 (6)

- (1) Includes shares of our common stock, par value \$.001 per share, which may be offered pursuant to this registration statement, which shares are issuable upon conversion or redemption of certain convertible debentures and upon the exercise of certain warrants, which were issued in 2005 and 2006. Should the conversion price of the debentures be adjusted resulting in our having insufficient shares, we will not rely upon Rule 416, but will file a new registration statement to cover the resale of such additional shares should that become necessary. In addition, should a decrease in the exercise price of the warrants occur as a result of an issuance or sale of shares below the then exercise price result in our having insufficient shares, we will not rely upon Rule 416, but will file a new registration statement to cover the resale of such additional shares should that become necessary.
- (2) Estimated solely for purposes of calculating the registration fee in accordance with Rule 457(c) under the Securities Act of 1933, as amended (the Act ), based on the average of the high and low prices for the Company s common stock as reported on the OTC Bulletin Board on January 22, 2007.
- (3) Includes shares of our common stock, par value \$.001 per share, which shares are issuable upon conversion or redemption of certain convertible debentures and upon the exercise of certain warrants, each of which were issued in 2005. These securities were previously registered on Registration Statement No. 333-129019, on Form SB-2 which was filed on October 14, 2005, originally declared effective on October 28, 2005, and subsequently amended.
- (4) Estimated solely for purposes of calculating the registration fee in accordance with Rule 457(c) under the Act, based on the average of the high and low prices for the Company's common stock as reported on the OTC Bulletin Board on October 12, 2005 in connection with the filing of Registration Statement No. 333-129019, which was filed on October 14, 2005.
- (5) The registration fee for these securities was paid and is transferred and carried forward to this registration statement pursuant to Rule 429 under the Securities Act.
- (6) As noted in footnote (5), above, the registration fee was partially offset by an aggregate amount of \$4,493.58 that was previously paid to register securities subject to this registration statement that were previously registered on Registration Statement No. 333-129019 on Form SB-2 filed on October 14, 2005. Pursuant to Rule 429 under the Securities Act, the previously paid registration fees for these securities is transferred and carried forward to this registration statement. The remaining amount of \$1,319.04 for the total registration fee has been paid.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THIS REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

### **EXPLANATORY NOTE**

The registrant is filing a single prospectus in this registration statement pursuant to Rule 429 under the Securities Act of 1933, as amended, in order to satisfy the requirements of the Securities Act and the rules and regulations thereunder for this offering and other offerings registered on earlier registration statements. The combined prospectus in this registration statement relates to, and shall act, upon effectiveness, as a post-effective amendment to Registration Statement No. 333-129019, which was filed on October 14, 2005, originally declared effective October 28, 2005, and subsequently amended.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THE SELLING SECURITY HOLDERS MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

# **PROSPECTUS**

# ADVANCED CELL TECHNOLOGY, INC.

# 13,516,367\* SHARES OF COMMON STOCK

\*Does not include 20,397,296 previously registered shares that are covered by this Prospectus

This prospectus relates to the resale to the public by the selling security holders of up to 13,516,367 shares of our common stock, par value \$.001 per share, underlying (i) convertible debentures issued in 2006 in the aggregate original principal amount of \$10,981,250, convertible at a conversion price of \$0.288, (ii) common stock purchase warrants issued in 2006 at an exercise price of \$0.3168, (iii) common stock purchase warrants, with an exercise price of \$0.3168, issued to a broker-dealer as commissions paid in connection with the private placement of the 2006 debentures and the 2006 warrants, (iv) convertible debentures issued in 2005 in the aggregate principal amount of \$22,276,250, convertible at a conversion price of \$0.90, and (v) common stock purchase warrants issued in 2005 at an exercise price of either \$0.95 or \$0.90.

The conversion price of each of the convertible debentures and the exercise price of the warrants described above is subject to anti-dilution and other customary adjustments.

This prospectus also covers the resale to the public by the selling security holders of up to 20,397,296 shares of common stock previously registered pursuant to that certain Registration Statement No. 333-129019, which was filed on October 14, 2005, originally declared effective October 28, 2005, and subsequently amended, including (i) shares of common stock underlying convertible debentures issued in 2005 and held by certain selling security holders, and (ii) shares of common stock issuable upon the exercise of common stock purchase warrants issued in 2005 and held by certain of the selling security holders.

This prospectus will act as a single combined prospectus as permitted by Rule 429 of the Securities Act of 1933, as amended. The selling security holders named herein may sell common stock from time to time in the principal market on which the stock is traded at the prevailing market price or in negotiated transactions. We will not receive any proceeds from the sales by the selling security holders, but we receive funds from the exercise of warrants held by selling security holders, if and when exercised. We will pay the expenses of registering these shares.

Our common stock is quoted on the OTC Bulletin Board under the symbol ACTC. On March 22, 2007, the closing bid and ask prices for one share of our common stock were \$0.76 and \$0.79, respectively, as reported by the OTC Bulletin Board. These over-the-counter quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

These securities are speculative and involve a high degree of risk. You should consider carefully the Risk Factors beginning on Page 6 of this prospectus before making a decision to purchase our stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.				
The date of this prospectus is	, 2007			

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#### PROSPECTUS SUMMARY

The following summary highlights selected information contained in this prospectus. This summary does not contain all the information you should consider before investing in the securities. Before making an investment decision, you should read the entire prospectus carefully, including the Risk Factors section, the financial statements and the notes to the financial statements.

### **Overview of Business**

We are a biotechnology company focused on developing and commercializing human stem cell technology in the emerging field of regenerative medicine. Our plan is to successfully develop and commercialize products for use in treatment of a wide array of chronic degenerative diseases and in regenerative repair of acute disease, such as trauma, infarction and burns. All of our technologies are at the basic research or in the pre-clinical stage of development.

Our embryonic stem cell research and development is supported by our portfolio of patents and patent applications and a research and development team that includes some of the world s leading scientists in the field of stem cell research and development. We have three core categories of research programs:

- Cellular Reprogramming the transformation of a patient s own cells into embryonic stem cells which can then be differentiated into therapeutically useful cells for treatment of disease.
- Reduced Complexity Program the production of stem cell therapies for off-the-shelf deployment to treat acute disease in time critical situations not amenable to reprogramming technologies.
- Stem Cell Differentiation the development of technologies designed to control the differentiation and re-differentiation of stem cells into specific cell types, such as hematopoietic, myocardial, skin, retinal, and neuronal cells, for therapeutic application.

The core of our technology platform is the ability to produce embryonic stem cells that are immunologically compatible with the patient. If successfully developed, our cellular reprogramming technologies will produce cells that will maximize the potential for effective use as transplants to replace diseased or destroyed cells in human patients. Our technology avoids reliance on more limited approaches that involve use of cell lines that are not histocompatible with the recipient, or therapies based upon use of adult stem cells. We believe that successful commercialization of stem cell technologies will require the ability to produce cells that are immunologically compatible with the patient, have the proliferative capacity of young cells and have specific therapeutic application. Our research and development programs are dedicated to production of stem cell therapies that share these characteristics.

We believe that successful development of our technologies could provide cell-based therapies for a broad range of diseases, including:

- hematopoietic cells for blood diseases and cancer
- myocardial and endothelial vascular tissue for cardiovascular disease
- skin cells for dermatological conditions
- retinal pigment epithelium cells as treatment for macular degeneration and retinal pigmentosis
- neuronal cells for spinal cord injury, Parkinson s disease and other neuro-degenerative diseases
- pancreatic islet cells for diabetes
- liver cells for hepatitis and cirrhosis
- cartilage cells for arthritis

• lung cells for a variety of pulmonary diseases

Our headquarters are located at 1201 Harbor Bay Parkway, Alameda, California, 94502, where we maintain one of our primary research facilities. Our other research facility is located in Worcester, Massachusetts.

#### **Recent Developments**

Financing. As disclosed in our Current Report on Form 8-K filed with the Securities and Exchange Commission, or SEC, on September 19, 2005, on September 15, 2005 we entered into a Securities Purchase Agreement pursuant to which certain purchasers, whom we refer to as the 2005 Purchasers, agreed to purchase from us amortizing convertible debentures and warrants to purchase shares of our common stock, referred to as the 2005 Debentures and the 2005 Warrants respectively. The Securities Purchase Agreement also provided the 2005 Purchasers with investment rights to purchase additional convertible debentures and warrants in the future. On September 6, 2006, we closed the exercise by certain of the 2005 Purchasers of this additional investment right, or AIR, under Section 4.18 of the Securities Purchase Agreement. In connection with the closing of the AIR, we entered into a new Securities Purchase Agreement, dated as of August 30, 2006 and executed and delivered on September 6, 2006, with the 2005 Purchasers exercising the AIR, whom we refer to as the Purchasers. The Purchasers purchased from us additional amortizing convertible debentures and warrants to purchase shares of our common stock, referred to as the 2006 Debentures and the 2006 Warrants respectively. We also entered into a Registration Rights Agreement with the Purchasers, which required us to file a registration statement with the Securities and Exchange Commission following the AIR closing registering on behalf of the Purchasers the resale of the shares of common stock issuable upon conversion or redemption of the 2006 Debentures and upon the exercise of the 2006 Warrants.

The 2006 Debentures issued at the closing of the AIR exercise will be due and payable in full three years from the closing, and will not bear interest. The 2006 Debentures begin amortizing 180 days after the closing with 1/30th of the principal amount due monthly over thirty months in cash or stock. The aggregate cash purchase price for the 2006 Debentures purchased at the AIR closing was \$8,750,000, which is a 20.3187% discount to the full principal amount of the 2006 Debentures of \$10,981,250. At any time from the closing date until the maturity date of the 2006 Debentures, the Purchasers have the right to convert the debentures, in whole or in part, into our common stock at the then effective conversion price. The 2006 Debentures are initially convertible into 38,129,340 shares of common stock at a price of \$0.288 per share. The conversion price will be subject to adjustment under circumstances set forth in the 2006 Debentures. The Purchasers also received the 2006 Warrants, which are exercisable for five years for 19,064,670 additional shares of common stock at a price of \$0.3168 per share. The 2006 Debentures and the 2005 Debentures are hereinafter referred to collectively as the debentures or the convertible debentures, and the 2006 Warrants and the 2005 Warrants are hereinafter referred to collectively as the warrants.

The 2006 Debentures and the 2006 Warrants contain covenants that will limit our ability to, among other things: incur or guarantee additional indebtedness; incur or create liens; amend our certificate of incorporation, bylaws or other charter documents so as to adversely affect any rights of the holders of the debentures; and repay or repurchase more than a *de minimis* number of shares of common stock other than as permitted in the debentures and other documents executed with the Purchasers. The 2006 Debentures include customary default provisions and an event of default includes, among other things, a change of control of us, the sale of all or substantially all of our assets, the lapse of the effectiveness of the registration statement for more than 30 consecutive trading days or 60 non-consecutive days during any 12-month period (with certain exceptions), the failure by us to timely deliver certificates to holders upon conversion and a default by us in any obligations under any indebtedness of at least \$150,000 which results in such indebtedness being accelerated. Upon the occurrence of an event of default, each 2006 Debenture may become immediately due and payable, either automatically or by declaration of the holder of such

debenture. The aggregate amount payable upon an acceleration by reason of an event of default will be equal to the greater of 120% of the principal amount of the debentures to be prepaid or the principal amount of the debentures to be prepaid, divided by the conversion price on the date specified in the debenture, multiplied by the closing price on the date set forth in the debenture.

In connection with this transaction, each Purchaser has contractually agreed to restrict its ability to convert the debentures, exercise the warrants and additional investment rights and receive shares of our common stock such that the number of shares of our common stock held by each such Purchaser and its affiliates after such conversion or exercise does not exceed 4.99% of the number of shares of our common stock outstanding immediately after giving effect to such conversion or exercise.

Certain of our officers have entered into a lock-up agreement that restricts their right to dispose of any shares of our common stock for a period of one year following the effective date of a registration statement registering the shares of our common stock as provided in the Registration Rights Agreement.

In connection with this financing, we paid a cash fee of \$783,875.40 and issued a warrant to purchase 3,050,347 shares of common stock at an exercise price of \$0.3168 per share, to T.R. Winston & Company, LLC, the placement agent for the securities sold in this transaction.

As reported in our Current Report on Form 8-K filed with the Securities and Exchange Commission on January 11, 2007, we closed amendments to the transaction documents described above. The amendments contained the basic terms described below.

The transaction documents associated with the 2005 Debentures and 2005 Warrants were amended in the following material respects:

- The conversion price of the 2005 Debentures was reset to \$0.90.
- The exercise price of the 2005 Warrants was reset to \$0.95.
- The 2005 Debentures were amended to waive the corporate milestones contained therein and give us the right to pay mandatory monthly redemptions in registered shares (or shares of common stock eligible for immediate resale under Rule 144) or cash, in our discretion.
- The Registration Rights Agreement was amended so as to limit the number of shares of common stock required to be registered to an amount not in excess of the limits imposed by the Securities and Exchange Commission s application of Rule 415 to secondary, resale registration statements, provided that we shall register not less than 30% of our issued and outstanding common stock (less shares held by our affiliates) every six months until the registration requirements of the applicable registration rights agreement are satisfied in their entirety, and provided further that we continue to exercise best efforts to satisfy the registration requirements of the original registration rights agreement as promptly as possible.
- The definition of Exempt Issuance was expanded to include certain additional recipients of options issued under our approved stock option plans.

The transaction documents associated with the 2006 Debentures and 2006 Warrants were amended in the following material respects:

- The 2006 Debentures were amended to waive the corporate milestones contained therein and give us the right to pay mandatory monthly redemptions in registered shares (or shares of common stock eligible for immediate resale under Rule 144) or cash, in our discretion.
- The commencement of monthly redemptions was deferred until September 7, 2007.
- The monthly redemption conversion price was reduced to the lesser of (a) the conversion price and (b) 70% of the average of the 10 closing prices immediately preceding the applicable monthly redemption.

- We were authorized to withdraw our pending registration statement, subject to satisfaction of the provisions of the amended registration rights agreement described immediately below.
- The registration rights agreement was amended as follows: (a) to require the filing of this registration statement by the later of the 10th trading day following the effective date of the amendment, or January 19, 2007; (b) the number of shares of common stock required to be registered is limited to an amount not in excess of the limits imposed by the Securities and Exchange Commission s application of Rule 415 to secondary, resale registration statements, provided that we register not less than 30% of our issued and outstanding common stock (less shares held by our affiliates) every six months until the registration requirements of the applicable registration rights agreement are satisfied in their entirety, and provided further that we continue to exercise best efforts to satisfy the registration requirements of the original registration rights agreement as promptly as possible.
- We agreed to limit cash expenditures to an amount not in excess of \$1.3 million per calendar month, subject to certain specified exceptions.
- The definition of Exempt Issuance was expanded to include certain additional recipients of options issued under our approved stock option plans.

Warrant Repricing. We concluded a repricing of the 2005 Warrants and our \$1.27 warrants on August 28, 2006. The repricing transaction resulted in the exercise of certain of the 2005 Warrants for 4,541,672 shares of our common stock, generating proceeds to us of approximately \$4,314,589. Replacement warrants identical in all respects to the exercised 2005 Warrants, except for an adjusted strike price of \$1.60, subsequently adjusted to \$0.95 pursuant to the anti-dilution provisions thereof, were issued to the warrant holders that exercised their warrants in the repricing transaction. Certain of the shares issuable upon the exercise of the replacement warrants issued to the Purchasers are included in the registration statement of which this prospectus is part. The holders of 2005 Warrants that did not participate in the repricing transaction were entitled to an adjustment in the exercise or conversion price, as applicable, of their 2005 Warrants and 2005 Debentures pursuant to the antidilution provisions thereof.

We issued a warrant to purchase 1,525,174 shares of common stock at an exercise price of \$0.3168 per share to T.R. Winston & Company, LLC as commission for broker services provided in connection with the closing of the warrant repricing.

All of the above securities were issued pursuant to an exemption from registration pursuant to Section 4(2) of the Securities Act of 1933.

#### **Risk Factors**

Investing in our common stock is subject to numerous risks, including the risk of delays in or discontinuation of our research and development due to lack of financing, inability to obtain necessary regulatory approvals to market the products, unforeseen safety issues relating to the products and dependence on third party collaborators to conduct research and development of the products. Because we are an early stage company with a very limited history of operations, we are also subject to many risks associated with early-stage companies. For a more detailed discussion of some of the risks you should consider before purchasing shares of our common stock, you are urged to carefully review and consider the section entitled Risk Factors beginning on page 6 of this prospectus.

# **Corporate History**

We were incorporated under Nevada law in May of 2000. On January 31, 2005, we completed an acquisition of Advanced Cell, Inc., a Delaware corporation, formerly known as Advanced Cell Technology, Inc. and referred to as ACT, pursuant to the terms of an agreement and plan of merger dated

January 3, 2005. At the time of the transaction, we had only nominal assets and no operating activities. Pursuant to the terms of the merger, a wholly owned subsidiary of ours merged with and into ACT, with ACT surviving the merger as our wholly owned subsidiary. As a result of the merger, all of the outstanding shares of the capital stock of ACT were converted, on a pro rata basis, into the right to receive an aggregate of approximately 18,000,000 shares of our common stock. In addition, all outstanding options and warrants to acquire shares of the capital stock of ACT were converted into the right to receive shares of our common stock, and we adopted the ACT stock option plan and all options granted thereunder. Upon completion of the merger, all of our pre-merger officers and directors resigned and were replaced by ACT s officers and directors. As a result of the merger, we effected a complete change of business operations and terminated our pre-merger business and succeeded to, and are continuing the business operations and research efforts of, ACT in the field of biotechnology.

On November 18, 2005, as described above, we reincorporated 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. Immediately following the reincorporation, we completed the merger of ACT with and into the company, so that the separate existence of ACT has ceased.

Our principal executive offices are located at 1201 Harbor Bay Parkway, Alameda, California, 94502, and our telephone number is (510) 748-4900.

#### The Offering

The selling security holders identified on page 22 of this prospectus are offering on a resale basis the following shares:

Common stock offered(1)	13,516,367 shares
Common stock outstanding before the offering(2)	45,681,925 shares
Common stock outstanding after the offering(3)	59,198,292 shares
OTC Bulletin Board symbol	ACTC

- (1) Does not include 20,397,296 shares of common stock covered by this prospectus which were previously registered on Registration Statement No. 333-129019, which was filed on October 14, 2005, originally declared effective on October 28, 2005, and subsequently amended.
- Based on the number of shares outstanding on January 19, 2007, not including shares issuable upon conversion or exercise of securities convertible or exercisable into shares of common stock.
- Based on the number of shares outstanding on January 19, 2007, assuming (i) conversion of the 2005 and 2006 Debentures, (ii) exercise of the 2005 and 2006 Warrants sold in the recent financing, (iii) exercise of those certain warrants issued in 2006 to certain selling security holders as consideration for their exercise of common stock purchase warrants previously issued to them in 2005, but not assuming (A) conversion or exercise of any other securities convertible or exercisable into shares of common stock and (B) the conversions and exercises referred to in preceding clauses (i) through (iii) are limited to the total number of shares registered hereunder and under the Registration Statement (No. 333-129019) filed in October of 2005.

#### RISK FACTORS

You should carefully consider each of the following risk factors and all of the other information provided in this prospectus before purchasing our common stock. The risks described below are those we currently believe may materially affect us. An investment in our common stock involves a high degree of risk, and should be considered only by persons who can afford the loss of their entire investment. This prospectus contains forward-looking statements that involve risks and uncertainties. We use words such as may, assumes, forecasts, believes, projects, estimates, anticipates, predicts, will, expects, intends, continue and variations thereof, and other statements contained in quarterly report, and the exhibits hereto, regarding matters that are not historical facts and are forward-looking statements. Because these statements involve risks and uncertainties, as well as certain assumptions, actual results may differ materially from those expressed or implied by such forward-looking statements. Factors that could cause actual results to differ materially include, but are not limited to risks inherent in: our early stage of development, including a lack of operating history, lack of profitable operations and the need for additional capital; the development and commercialization of largely novel and unproven technologies and products; our ability to protect, maintain, and defend our intellectual property rights: uncertainties regarding our ability to obtain the capital resources needed to continue research and development operations and to conduct research, preclinical development and clinical trials necessary for regulatory approvals; uncertainty regarding the outcome of clinical trials and our overall ability to compete effectively in a highly complex, rapidly developing, capital intensive and competitive industry.

#### Risks Relating to Our Early Stage of Development

We have a limited operating history on which potential investors may evaluate our operations and prospects for profitable operations. We have a limited operating history on which a potential investor may base an evaluation of us and our prospects. If we are unable to begin and sustain profitable operations, investors may lose their entire investment in us. We are in the pre-clinical stage, and our prospects must be considered speculative in light of the risks, expenses and difficulties frequently encountered by companies in their early stages of development, particularly in light of the uncertainties relating to the new, competitive and rapidly evolving markets in which we anticipate we will operate. To attempt to address these risks, we must, among other things, further develop our technologies, products and services, successfully implement our research, development, marketing and commercialization strategies, respond to competitive developments and attract, retain and motivate qualified personnel. A substantial risk is involved in investing in us because, as an early stage company,

- we have fewer resources than an established company,
- our management may be more likely to make mistakes at such an early stage, and
- we may be more vulnerable operationally and financially to any mistakes that may be made, as well as to external factors beyond our control.

These difficulties are compounded by our heavy dependence on emerging and sometimes unproven technologies. In addition, some of our significant potential revenue sources involve ethically sensitive and controversial issues which could become the subject of legislation or regulations that could materially restrict our operations and, therefore, harm our financial condition, operating results and prospects for bringing our investors a return on their investment.

We have a history of operating losses, and we cannot assure you that we will achieve future revenues or operating profits. We have generated modest revenue to date from our operations. Historically, we have had net operating losses each year since our inception. We have limited current potential sources of revenue from license fees and product development revenues, and we cannot assure you that we will be able to develop such revenue sources or that our operations will become profitable, even if we are able to commercialize our technologies or any products or services developed from those technologies. If we

continue to suffer losses as we have in the past, investors may not receive any return on their investment and may lose their entire investment.

Although we have revenues from license fees and royalties, we have no commercially marketable products and no immediate ability to generate revenue from commercial products, nor any assurance of being able to develop our technologies for commercial applications. As a result, we may never be able to operate profitably. We are just beginning to identify products available for pre-clinical trials and may not receive significant revenues from commercial sales of our products for the next several years, if at all, although we do generate revenues from licensing activities. We have marketed only a limited amount of services based on our technologies and have little experience in doing so. Our technologies and any potential products or services that we may develop will require significant additional effort and investment prior to material commercialization and, in the case of any biomedical products, pre-clinical and clinical testing and regulatory approvals. We cannot assure you that we will be able to develop any such technologies or any products or services, or that such technologies, products or services will prove to be safe and efficacious in clinical trials, meet applicable regulatory standards, be capable of being produced in commercial quantities at acceptable costs or be successfully marketed. For that reason, we may not be able to generate revenues from commercial production or operate profitably.

We have sold the agricultural portion of our business in order to finance operations. The agricultural applications of our technology generally have a more rapid realization of revenues due to more limited regulatory requirements and testing. Our ability to generate revenue from any agricultural applications of our technology is limited to existing license royalties, if any.

We will require substantial additional funds to continue operating which may not be available on acceptable terms, if at all. We have losses from operations, negative cash flows from operations and a substantial stockholders—deficit that raise substantial doubt about the Company—s ability to continue as a going concern. We do not believe that our cash from all sources, including cash, cash equivalents and anticipated revenue stream from licensing fees and sponsored research contracts is sufficient for us to continue operations beyond December 31, 2007 without raising additional financing.

Management continues to evaluate alternatives and sources for additional funding, which may include public or private investors, strategic partners, and grant programs available through specific states or foundations, although there is no assurance that such sources will result in raising additional capital. Lack of necessary funds may require us to delay, scale back or eliminate some or all of our research and product development programs and /or our capital expenditures, to license our potential products or technologies to third parties, to consider business combinations related to ongoing business operations, or shut down some, or all, of our operations.

In addition, our cash requirements may vary materially from those now planned because of results of research and development, potential relationships with strategic partners, changes in the focus and direction of our research and development programs, competition, litigation required to protect our technology, technological advances, the cost of pre-clinical and clinical testing, the regulatory process of the United States Food and Drug Administration, or FDA, and foreign regulators, whether any of our products become approved or the market acceptance of any such products and other factors. Our current cash reserves are not sufficient to fund our operations through the commercialization of our first products or services.

We have limited clinical testing, regulatory, manufacturing, marketing, distribution and sales capabilities which may limit our ability to generate revenues. Because of the relatively early stage of our research and development programs, we have not yet invested significantly in clinical testing, regulatory, manufacturing, or in marketing, distribution or product sales resources. We cannot assure you that we will be able to develop any such resources successfully or as quickly as may be necessary. The inability to do so may harm our ability to generate revenues or operate profitably.

#### **Risks Relating to Competition**

Our competition includes both public and private organizations and collaborations among academic institutions and large pharmaceutical companies, most of which have significantly greater experience and financial resources than we do. The biotechnology and pharmaceutical industries are characterized by intense competition. We compete against numerous companies, both domestic and foreign, many of which have substantially greater experience and financial and other resources than we have. Several such enterprises have initiated cell therapy research programs and/or efforts to treat the same diseases targeted by us. Companies such as Geron Corporation, Genzyme Corporation, StemCells, Inc., Aastrom Biosciences, Inc. and Viacell, Inc., as well as others, many of which have substantially greater resources and experience in our fields than we do, are well situated to effectively compete with us. Any of the world s largest pharmaceutical companies represents a significant actual or potential competitor with vastly greater resources than ours.

These companies hold licenses to genetic selection technologies and other technologies that are competitive with our technologies. These and other competitive enterprises have devoted, and will continue to devote, substantial resources to the development of technologies and products in competition with us.

Private and public academic and research institutions also compete with us in the research and development of human therapeutic or agricultural products. In the past several years, the pharmaceutical industry has selectively entered into collaborations with both public and private organizations to explore the possibilities that stem cell therapies may present for substantive breakthroughs in the fight against disease.

In addition, many of our competitors have significantly greater experience than we have in the development, pre-clinical testing and human clinical trials of biotechnology and pharmaceutical products, in obtaining FDA and other regulatory approvals of such products and in manufacturing and marketing such products. Accordingly our competitors may succeed in obtaining FDA approval for products more rapidly or effectively than we can. Our competitors may also be the first to discover and obtain a valid patent to a particular stem cell which may effectively block all others from doing so. It will be important for us or our collaborators to be the first to discover any stem cell that we are seeking to discover. Failure to be the first could prevent us from commercializing all of our research and development affected by that discovery. Additionally, if we commence commercial sales of any products, we will also be competing with respect to manufacturing efficiency and sales and marketing capabilities, areas in which we have no experience.

The United States is encountering tremendous competition from many foreign countries that are providing an environment more attractive for stem cell research. The governments of numerous foreign countries are investing in stem cell research, providing facilities, personnel and legal environments intended to attract biotechnology companies and encourage stem cell research and development of stem cell-related technologies.

These efforts by foreign countries may make it more difficult to effectively compete in our industry and may generate competitors with substantially greater resources than ours.

### Risks Relating to Our Technology

We rely on nuclear transfer and embryonic stem cell technologies that we may not be able to successfully develop, which will prevent us from generating revenues, operating profitably or providing investors any return on their investment. We have concentrated our research on our nuclear transfer and embryonic stem cell technologies, and our ability to operate profitably will depend on being able to successfully develop these technologies for human applications. These are emerging technologies with, as

yet, limited human applications. We cannot guarantee that we will be able to successfully develop our nuclear transfer and embryonic stem cell technologies or that such development will result in products or services with any significant commercial utility. We anticipate that the commercial sale of such products or services, and royalty/licensing fees related to our technology, would be our primary sources of revenues. If we are unable to develop our technologies, investors will likely lose their entire investment in us.

The outcome of pre-clinical, clinical and product testing of our products is uncertain, and if we are unable to satisfactorily complete such testing, or if such testing yields unsatisfactory results, we will be unable to commercially produce our proposed products. Before obtaining regulatory approvals for the commercial sale of any potential human products, our products will be subjected to extensive pre-clinical and clinical testing to demonstrate their safety and efficacy in humans. We cannot assure you that the clinical trials of our products, or those of our licensees or collaborators, will demonstrate the safety and efficacy of such products at all, or to the extent necessary to obtain appropriate regulatory approvals, or that the testing of such products will be completed in a timely manner, if at all, or without significant increases in costs, program delays or both, all of which could harm our ability to generate revenues. In addition, our prospective products may not prove to be more effective for treating disease or injury than current therapies. Accordingly, we may have to delay or abandon efforts to research, develop or obtain regulatory approval to market our prospective products. Many companies involved in biotechnology research and development have suffered significant setbacks in advanced clinical trials, even after promising results in earlier trials. The failure to adequately demonstrate the safety and efficacy of a therapeutic product under development could delay or prevent regulatory approval of the product and could harm our ability to generate revenues, operate profitably or produce any return on an investment in us.

While the marketing of cloned or transgenic animals does not currently require regulatory approval, such approval may be required in the future. We cannot assure you that we would obtain such approvals or that our licensees products would be accepted in the marketplace. This lack of approval could reduce or preclude any royalty revenues we might receive from our licensees in that field.

We may not be able to commercially develop our technologies and proposed product lines, which, in turn, would significantly harm our ability to earn revenues and result in a loss of investment. Our ability to commercially develop our technologies will be dictated in large part by forces outside our control which cannot be predicted, including, but not limited to, general economic conditions, the success of our research and pre-clinical and field testing, the availability of collaborative partners to finance our work in pursuing applications of nuclear transfer technology and technological or other developments in the biomedical field which, due to efficiencies, technological breakthroughs or greater acceptance in the biomedical industry, may render one or more areas of commercialization more attractive, obsolete or competitively unattractive. It is possible that one or more areas of commercialization will not be pursued at all if a collaborative partner or entity willing to fund research and development cannot be located. Our decisions regarding the ultimate products and/or services we pursue could have a significant adverse affect on our ability to earn revenue if we misinterpret trends, underestimate development costs and/or pursue wrong products or services. Any of these factors either alone or in concert could materially harm our ability to earn revenues and could result in a loss of any investment in us.

If we are unable to keep up with rapid technological changes in our field or compete effectively, we will be unable to operate profitably. We are engaged in activities in the biotechnology field, which is characterized by extensive research efforts and rapid technological progress. If we fail to anticipate or respond adequately to technological developments, our ability to operate profitably could suffer. We cannot assure you that research and discoveries by other biotechnology, agricultural, pharmaceutical or other companies will not render our technologies or potential products or services uneconomical or result in products superior to those we develop or that any technologies, products or services we develop will be preferred to any existing or newly-developed technologies, products or services.

We may not be able to protect our proprietary technology, which could harm our ability to operate profitably. The biotechnology and pharmaceutical industries place considerable importance on obtaining patent and trade secret protection for new technologies, products and processes. Our success will depend, to a substantial degree, on our ability to obtain and enforce patent protection for our products, preserve any trade secrets and operate without infringing the proprietary rights of others. We cannot assure you that:

- we will succeed in obtaining any patents in a timely manner or at all, or that the breadth or degree of protection of any such patents will protect our interests,
- the use of our technology will not infringe on the proprietary rights of others,
- patent applications relating to our potential products or technologies will result in the issuance of any patents or that, if issued, such patents will afford adequate protection to us or not be challenged invalidated or infringed, and
- patents will not issue to other parties, which may be infringed by our potential products or technologies.

We are aware of certain patents that have been granted to others and certain patent applications that have been filed by others with respect to nuclear transfer technologies. The fields in which we operate have been characterized by significant efforts by competitors to establish dominant or blocking patent rights to gain a competitive advantage, and by considerable differences of opinion as to the value and legal legitimacy of competitors purported patent rights and the technologies they actually utilize in their businesses.

Our business is highly dependent upon maintaining licenses with respect to key technology. Several of the key patents we utilize are licensed to us by third parties. These licenses are subject to termination under certain circumstances (including, for example, our failure to make minimum royalty payments or to timely achieve development and commercialization benchmarks). The loss of any of such licenses, or the conversion of such licenses to non-exclusive licenses, could harm our operations and/or enhance the prospects of our competitors.

Certain of these licenses also contain restrictions, such as limitations on our ability to grant sublicenses that could materially interfere with our ability to generate revenue through the licensing or sale to third parties of important and valuable technologies that we have, for strategic reasons, elected not to pursue directly. The possibility exists that in the future we will require further licenses to complete and/or commercialize our proposed products. We cannot assure you that we will be able to acquire any such licenses on a commercially viable basis.

We may not be able to adequately protect against piracy of intellectual property in foreign jurisdictions. Considerable research in the areas of stem cells, cell therapeutics and regenerative medicine is being performed in countries outside of the United States, and a number of our competitors are located in those countries. The laws protecting intellectual property in some of those countries may not provide protection for our trade secrets and intellectual property adequate to prevent our competitors from misappropriating our trade secrets or intellectual property. If our trade secrets or intellectual property are misappropriated in those countries, we may be without adequate remedies to address the issue.

Certain of our technology is not protectable by patent. Certain parts of our know-how and technology are not patentable. To protect our proprietary position in such know-how and technology, we intend to require all employees, consultants, advisors and collaborators to enter into confidentiality and invention ownership agreements with us. We cannot assure you, however, that these agreements will provide meaningful protection for our trade secrets, know-how or other proprietary information in the

event of any unauthorized use or disclosure. Further, in the absence of patent protection, competitors who independently develop substantially equivalent technology may harm our business.

Patent litigation presents an ongoing threat to our business with respect to both outcomes and costs. We have previously been involved in patent interference litigation, and it is possible that further litigation over patent matters with one or more competitors could arise. We could incur substantial litigation or interference costs in defending ourselves against suits brought against us or in suits in which we may assert our patents against others. If the outcome of any such litigation is unfavorable, our business could be materially adversely affected. To determine the priority of inventions, we may also have to participate in interference proceedings declared by the United States Patent and Trademark Office, which could result in substantial cost to us. Without additional capital, we may not have the resources to adequately defend or pursue this litigation.

#### Risks Relating to the September 2005 and September 2006 Financings

If we are required for any reason to repay our outstanding debentures we would be required to deplete our working capital, if available, or raise additional funds. Our failure to repay the convertible debentures, if required, could result in legal action against us, which could require the sale of substantial assets. We have outstanding, as of December 31, 2006, \$23,505,214 aggregate original principal amount of convertible debentures with an original issue discount of 20.3187% with \$10,824,375 in 2006 Debentures and \$12,680,839 in 2005 Debentures. We are required to redeem on a monthly basis, by payment with cash or with shares of our common stock, 1/30th of the aggregate original principal amount of the debentures. Unless waived by the holders of the debentures, in order to redeem with shares of our common stock we must satisfy certain conditions which have yet to be satisfied, including such conditions as the listing of our shares of common stock on either the NASDAQ National Market, the NASDAQ Small Cap Market, or the American Stock Exchange. These monthly payments will impact the amount of working capital available to us.

The 2005 Debentures are due and payable on September 14, 2008, unless sooner converted into shares of our common stock, and the 2006 Debentures are due and payable on February 28, 2010, unless sooner converted into shares of our common stock. Any event of default could require the early repayment of the convertible debentures, including the accruing of interest on the outstanding principal balance of the debentures if the default is not cured with the specified grace period. We anticipate that the full amount of the convertible debentures will be converted into shares of our common stock, in accordance with the terms of the convertible debentures. If, prior to the maturity date, we are required to repay the convertible debentures in full, we would be required to use our limited working capital and raise additional funds. If we were unable to repay the notes when required, the debenture holders could commence legal action against us to recover the amounts due. Any such action could require us to curtail or cease operations.

There are a large number of shares underlying our convertible debentures in full, and warrants that are registered and available for sale and the sale of these shares may depress the market price of our common stock. As of March 1, 2007, we had:

- certain outstanding 2005 Debentures that may be converted into an estimated 6,412,894 shares of common stock based on a conversion price of \$0.90, and
- outstanding 2005 Warrants to purchase 1,463,223 shares of common stock with an exercise price of \$0.95 that were issued in connection with the sale of the 2005 Debentures, and
- outstanding 2006 Debentures that may be converted into an estimated 37,584,635 shares of common stock based on a conversion price of \$0.288, and
- outstanding 2006 Warrants to purchase 19,064,670 shares of common stock with an exercise price of \$0.3168 that were issued in connection with the sale of the 2006 Debentures, and

- outstanding replacement warrants to purchase 4,541,672 shares of common stock with an exercise price of \$0.95, and
- outstanding warrants to purchase 4,575,521 shares of common stock with an exercise price of \$0.3168 that were issued in connection with the sale of the 2006 Debentures.

Sales of a substantial number of shares of our common stock in the public market could adversely affect the market price for our common stock and make it more difficult for you to sell shares of our common stock at times and prices that you feel are appropriate.

The issuance of shares upon conversion of the convertible debentures and exercise of outstanding warrants will cause immediate and substantial dilution to our existing stockholders. The issuance of shares upon conversion of the convertible debentures and exercise of warrants, including the replacement warrants, will result in substantial dilution to the interests of other stockholders since the selling security holders may ultimately convert and sell the full amount issuable on conversion. Although no single selling security holder may convert its convertible debentures and/or exercise its warrants if such conversion or exercise would cause it to own more than 4.99% of our outstanding common stock, this restriction does not prevent each selling security holder from converting and/or exercising some of its holdings and then converting the rest of its holdings. In this way, each selling security holder could sell more than this limit while never holding more than this limit. There is no upper limit on the number of shares that may be issued which will have the effect of further diluting the proportionate equity interest and voting power of holders of our common stock, including investors in this offering. In addition, the issuance of the 2006 Debentures and the 2006 Warrants triggered certain anti-dilution rights for certain third parties currently holding securities of the Company resulting in substantial dilution to the interests of other stockholders.

Payment of mandatory monthly redemptions in shares of common stock will result in substantial dilution. We expect to satisfy all or a significant portion of our obligation to redeem 1/30th of the aggregate original principal amount of debentures per month through issuance of additional shares of our common stock. This approach will result in substantial dilution to the interests of other stockholders.

If we fail to effect and maintain registration of the common stock issued or issuable pursuant to conversion of our debentures, or upon exercise of our warrants, we may be obligated to pay the investors of those securities liquidated damages. We have various obligations to file and obtain the effectiveness of certain registration statements which include certain outstanding common stock and common stock underlying outstanding debentures and common stock underlying the warrants. If we fail to meet any obligations we have to have effective and current registration statements available (including the current registration statement related to the common stock underlying our debentures and warrants), we may become obligated to pay liquidated damages to investors to the extent they may be entitled to such damages. In addition, pursuant to the amendments to the 2005 and 2006 financing documents described above, we are contractually obligated to file additional registration statements at various times in the future. Because of the SEC s recent interpretation of Rule 415, we cannot offer any assurances that we will be able to obtain the effectiveness of any registration statement or post-effective amendments that we may file.

#### **Risks Relating to Government Regulation**

Companies such as ours engaged in research using nuclear transfer and embryonic stem cells are currently subject to strict government regulations, and our operations could be harmed by any legislative or administrative efforts impacting the use of nuclear transfer technology or human embryonic material. Our business is focused on human cell therapy, which includes the production of human differentiated cells from stem cells and involves the use of nuclear transfer technology, human oocytes, and embryonic material. Nuclear transfer technology, commonly known as therapeutic cloning, and research utilizing embryonic stem cells are controversial subjects, and are currently subject to intense scrutiny, both in the

United States, the United Nations and throughout the world, particularly in the area of nuclear transfer of human cells and the use of human embryonic material.

We cannot assure you that our operations will not be harmed by any legislative or administrative efforts by politicians or groups opposed to the development of nuclear transfer technology generally or the use of nuclear transfer for therapeutic cloning of human cells specifically. Further, we cannot assure you that legislative or administrative restrictions directly or indirectly delaying, limiting or preventing the use of nuclear transfer technology or human embryonic material or the sale, manufacture or use of products or services derived from nuclear transfer technology or human embryonic material will not be adopted in the future.

Restrictions on the use of human embryonic stem cells, and the ethical, legal and social implications of that research, could prevent us from developing or gaining acceptance for commercially viable products in these areas. Some of our most important programs involve the use of stem cells that are derived from human embryos. The use of human embryonic stem cells gives rise to ethical, legal and social issues regarding the appropriate use of these cells. In the event that our research related to human embryonic stem cells becomes the subject of adverse commentary or publicity, the market price for our common stock could be significantly harmed. Some political and religious groups have voiced opposition to our technology and practices. We use stem cells derived from human embryos that have been created for in vitro fertilization procedures but are no longer desired or suitable for that use and are donated with appropriate informed consent for research use. Many research institutions, including some of our scientific collaborators, have adopted policies regarding the ethical use of human embryonic tissue. These policies may have the effect of limiting the scope of research conducted using human embryonic stem cells, thereby impairing our ability to conduct research in this field.

Potential and actual legislation and regulation at the federal or state level related to our technology could limit our activities and ability to develop products for commercial sales, depriving us of our anticipated source of future revenues. Legislative bills could be introduced in the future aiming to prohibit the use or commercialization of somatic cell nuclear transfer technology or of any products resulting from it, including those related to human therapeutic cloning and regenerative medicine. Such legislation could have a significant influence on our ability to pursue our research, development and commercialization plans in the United States.

Any future or additional government-imposed restrictions in these or other jurisdictions with respect to use of embryos or human embryonic stem cells in research and development could have a material adverse effect on us, by, among other things:

- harming our ability to establish critical partnerships and collaborations,
- delaying or preventing progress in our research and development,
- limiting or preventing the development, sale or use of our products, and
- causing a decrease in the price of our stock.

Because we or our collaborators must obtain regulatory approval to market our products in the United States and other countries, we cannot predict whether or when we will be permitted to commercialize our products. Federal, state and local governments in the United States and governments in other countries have significant regulations in place that govern many of our activities. We are or may become subject to various federal, state and local laws, regulations and recommendations relating to safe working conditions, laboratory and manufacturing practices, the experimental use of animals and the use and disposal of hazardous or potentially hazardous substances used in connection with our research and development work. The preclinical testing and clinical trials of the products that we or our collaborators develop are subject to extensive government regulation that may prevent us from creating commercially viable products from our discoveries. In addition, the sale by us or our collaborators of any commercially

viable product will be subject to government regulation from several standpoints, including manufacturing, advertising and promoting, selling and marketing, labeling, and distributing.

If, and to the extent that, we are unable to comply with these regulations, our ability to earn revenues will be materially and negatively impacted. The regulatory process, particularly in the biotechnology field, is uncertain, can take many years and requires the expenditure of substantial resources. Biological drugs and non-biological drugs are rigorously regulated. In particular, proposed human pharmaceutical therapeutic product candidates are subject to rigorous preclinical and clinical testing and other requirements by the FDA in the United States and similar health authorities in other countries in order to demonstrate safety and efficacy. We may never obtain regulatory approval to market our proposed products. For additional information about governmental regulations that will affect our planned and intended business operations, see DESCRIPTION OF BUSINESS *Government Regulation* below.

Our products may not receive FDA approval, which would prevent us from commercially marketing our products and producing revenues. The FDA and comparable government agencies in foreign countries impose substantial regulations on the manufacture and marketing of pharmaceutical products through lengthy and detailed laboratory, pre-clinical and clinical testing procedures, sampling activities and other costly and time-consuming procedures. Satisfaction of these regulations typically takes several years or more and varies substantially based upon the type, complexity and novelty of the proposed product. We cannot yet accurately predict when we might first submit any Investigational New Drug, or IND, application to the FDA, or whether any such IND application would be granted on a timely basis, if at all, nor can we assure you that we will successfully complete any clinical trials in connection with any such IND application. Further, we cannot yet accurately predict when we might first submit any product license application for FDA approval or whether any such product license application would be granted on a timely basis, if at all. As a result, we cannot assure you that FDA approvals for any products developed by us will be granted on a timely basis, if at all. Any such delay in obtaining, or failure to obtain, such approvals could have a material adverse effect on the marketing of our products and our ability to generate product revenue. For additional information about governmental regulations that will affect our planned and intended business operations, see DESCRIPTION OF BUSINESS Government Regulation below.

For-profit entities may be prohibited from benefiting from grant funding. There has been much publicity about grant resources for stem cell research, including Proposition 71 in California, which is described more fully under the heading DESCRIPTION OF BUSINESS *California Proposition 71* below. There is ongoing litigation in California that may delay, or prevent the sale of State bonds that would fund the activities contemplated by California voters. In addition, rules and regulations related to any funding that may ultimately be provided, the type of entity that will be eligible for funding, the science to be funded, and funding details have not been finalized. As a result of these uncertainties regarding Proposition 71, we cannot assure you that funding, if any, will be available to us, or any for-profit entity.

The government maintains certain rights in technology that we develop using government grant money and we may lose the revenues from such technology if we do not commercialize and utilize the technology pursuant to established government guidelines. Certain of our and our licensors—research has been or is being funded in part by government grants. In connection with certain grants, the U.S. government retains rights in the technology developed with the grant. These rights could restrict our ability to fully capitalize upon the value of this research.

# Risks Relating to Our Reliance on Third Parties

We depend on our collaborators to help us develop and test our proposed products, and our ability to develop and commercialize products may be impaired or delayed if collaborations are unsuccessful. Our strategy for the development, clinical testing and commercialization of our proposed products requires that we enter into collaborations with corporate partners, licensors, licensees and others. We are dependent upon the subsequent success of these other parties in performing their respective responsibilities and the

continued cooperation of our partners. Our collaborators may not cooperate with us or perform their obligations under our agreements with them. We cannot control the amount and timing of our collaborators—resources that will be devoted to our research and development activities related to our collaborative agreements with them. Our collaborators may choose to pursue existing or alternative technologies in preference to those being developed in collaboration with us.

Under agreements with collaborators, we may rely significantly on such collaborators to, among other things:

- design and conduct advanced clinical trials in the event that we reach clinical trials,
- fund research and development activities with us,
- pay us fees upon the achievement of milestones, and
- market with us any commercial products that result from our collaborations.

The development and commercialization of potential products will be delayed if collaborators fail to conduct these activities in a timely manner or at all. In addition, our collaborators could terminate their agreements with us and we may not receive any development or milestone payments. If we do not achieve milestones set forth in the agreements, or if our collaborators breach or terminate their collaborative agreements with us, our business may be materially harmed.

Our reliance on the activities of our non-employee consultants, research institutions, and scientific contractors, whose activities are not wholly within our control, may lead to delays in development of our proposed products. We rely extensively upon and have relationships with scientific consultants at academic and other institutions, some of whom conduct research at our request, and other consultants with expertise in clinical development strategy or other matters. These consultants are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. We have limited control over the activities of these consultants and, except as otherwise required by our collaboration and consulting agreements to the extent they exist, can expect only limited amounts of their time to be dedicated to our activities.

In addition, we have formed research collaborations with academic and other research institutions throughout the world. These research facilities may have commitments to other commercial and non-commercial entities. We have limited control over the operations of these laboratories and can expect only limited amounts of time to be dedicated to our research goals.

We also rely on other companies for certain process development or other technical scientific work. We have contracts with these companies that specify the work to be done and results to be achieved, but we do not have direct control over their personnel or operations. If any of these third parties are unable or refuse to contribute to projects on which we need their help, our ability to generate advances in our technologies and develop our products could be significantly harmed.

#### **General Risks Relating to Our Business**

We may be subject to litigation that will be costly to defend or pursue and uncertain in its outcome. Our business may bring us into conflict with our licensees, licensors, or others with whom we have contractual or other business relationships, or with our competitors or others whose interests differ from ours. If we are unable to resolve those conflicts on terms that are satisfactory to all parties, we may become involved in litigation brought by or against us. That litigation is likely to be expensive and may require a significant amount of management s time and attention, at the expense of other aspects of our business. The outcome of litigation is always uncertain, and in some cases could include judgments against us that require us to pay damages, enjoin us from certain activities, or otherwise affect our legal or contractual rights, which could have a significant adverse effect on our business.

We may not be able to obtain third-party patient reimbursement or favorable product pricing, which would reduce our ability to operate profitably. Our ability to successfully commercialize certain of our proposed products in the human therapeutic field may depend to a significant degree on patient reimbursement of the costs of such products and related treatments at acceptable levels from government authorities, private health insurers and other organizations, such as health maintenance organizations. We cannot assure you that reimbursement in the United States or foreign countries will be available for any products we may develop or, if available, will not be decreased in the future, or that reimbursement amounts will not reduce the demand for, or the price of, our products with a consequent harm to our business. We cannot predict what additional regulation or legislation relating to the health care industry or third-party coverage and reimbursement may be enacted in the future or what effect such regulation or legislation may have on our business. If additional regulations are overly onerous or expensive, or if health care related legislation makes our business more expensive or burdensome than originally anticipated, we may be forced to significantly downsize our business plans or completely abandon our business model.

Our products are likely to be expensive to manufacture, and they may not be profitable if we are unable to control the costs to manufacture them. Our products are likely to be significantly more expensive to manufacture than most other drugs currently on the market today. Our present manufacturing processes produce modest quantities of product intended for use in our ongoing research activities, and we have not developed processes, procedures and capability to produce commercial volumes of product. We hope to substantially reduce manufacturing costs through process improvements, development of new science, increases in manufacturing scale and outsourcing to experienced manufacturers. If we are not able to make these or other improvements, and depending on the pricing of the product, our profit margins may be significantly less than that of most drugs on the market today. In addition, we may not be able to charge a high enough price for any cell therapy product we develop, even if they are safe and effective, to make a profit. If we are unable to realize significant profits from our potential product candidates, our business would be materially harmed.

To be successful, our proposed products must be accepted by the health care community, which can be very slow to adopt or unreceptive to new technologies and products. Our proposed products and those developed by our collaborative partners, if approved for marketing, may not achieve market acceptance since hospitals, physicians, patients or the medical community in general may decide not to accept and utilize these products. The products that we are attempting to develop represent substantial departures from established treatment methods and will compete with a number of more conventional drugs and therapies manufactured and marketed by major pharmaceutical companies. The degree of market acceptance of any of our developed products will depend on a number of factors, including:

- our establishment and demonstration to the medical community of the clinical efficacy and safety of our proposed products;
- our ability to create products that are superior to alternatives currently on the market;
- our ability to establish in the medical community the potential advantage of our treatments over alternative treatment methods; and
- reimbursement policies of government and third-party payors.

If the health care community does not accept our products for any of the foregoing reasons, or for any other reason, our business would be materially harmed.

Our current source of revenues depends on the stability and performance of our sublicensees. Our ability to collect royalties on product sales from our sublicensees will depend on the financial and operational success of the companies operating under a sublicense. Revenues from those licensees will depend upon the financial and operational success of those third parties. We cannot assure you that these licensees will be successful in obtaining requisite financing or in developing and successfully marketing

their products. These licensees may experience unanticipated obstacles including regulatory hurdles, and scientific or technical challenges, which could have the effect of reducing their ability to generate revenues and pay us royalties.

We depend on key personnel for our continued operations and future success, and a loss of certain key personnel could significantly hinder our ability to move forward with our business plan. Because of the specialized nature of our business, we are highly dependent on our ability to identify, hire, train and retain highly qualified scientific and technical personnel for the research and development activities we conduct or sponsor. The loss of one or more certain key executive officers, or scientific officers, would be significantly detrimental to us. In addition, recruiting and retaining qualified scientific personnel to perform research and development work is critical to our success. Our anticipated growth and expansion into areas and activities requiring additional expertise, such as clinical testing, regulatory compliance, manufacturing and marketing, will require the addition of new management personnel and the development of additional expertise by existing management personnel. There is intense competition for qualified personnel in the areas of our present and planned activities, and there can be no assurance that we will be able to continue to attract and retain the qualified personnel necessary for the development of our business. The failure to attract and retain such personnel or to develop such expertise would adversely affect our business.

Our credibility as a business operating in the field of human embryonic stem cells is largely dependent upon the support of our Ethics Advisory Board. Because the use of human embryonic stem cells gives rise to ethical, legal and social issues, we have instituted an Ethics Advisory Board. Our Ethics Advisory Board is made up of highly qualified individuals with expertise in the field of human embryonic stem cells. We cannot assure you that these members will continue to serve on our Ethics Advisory Board, and the loss of any such member may affect the credibility and effectiveness of the Board. As a result, our business may be materially harmed in the event of any such loss.

Our insurance policies may be inadequate and potentially expose us to unrecoverable risks. We have limited director and officer insurance and commercial insurance policies. Any significant insurance claims would have a material adverse effect on our business, financial condition and results of operations. Insurance availability, coverage terms and pricing continue to vary with market conditions. We endeavor to obtain appropriate insurance coverage for insurable risks that we identify, however, we may fail to correctly anticipate or quantify insurable risks, we may not be able to obtain appropriate insurance coverage, and insurers may not respond as we intend to cover insurable events that may occur. We have observed rapidly changing conditions in the insurance markets relating to nearly all areas of traditional corporate insurance. Such conditions have resulted in higher premium costs, higher policy deductibles, and lower coverage limits. For some risks, we may not have or maintain insurance coverage because of cost or availability.

We have no product liability insurance, which may leave us vulnerable to future claims we will be unable to satisfy. The testing, manufacturing, marketing and sale of human therapeutic products entail an inherent risk of product liability claims, and we cannot assure you that substantial product liability claims will not be asserted against us. We have no product liability insurance. In the event we are forced to expend significant funds on defending product liability actions, and in the event those funds come from operating capital, we will be required to reduce our business activities, which could lead to significant losses.

We cannot assure you that adequate insurance coverage will be available in the future on acceptable terms, if at all, or that, if available, we will be able to maintain any such insurance at sufficient levels of coverage or that any such insurance will provide adequate protection against potential liabilities. Whether or not a product liability insurance policy is obtained or maintained in the future, any product liability claim could harm our business or financial condition.

We presently have members of management and other key employees located in various locations throughout the country which adds complexities to the operation of the business. Presently, we have members of management and other key employees located in both California and Massachusetts, which adds complexities to the operation of our business. We intend to maintain our research facilities in Massachusetts and we have established corporate offices and an additional research facility in California. We will likely continue to incur significant costs associated with maintaining multiple locations.

We face risks related to compliance with corporate governance laws and financial reporting standards. The Sarbanes-Oxley Act of 2002, as well as related new rules and regulations implemented by the Securities and Exchange Commission and the Public Company Accounting Oversight Board, require changes in the corporate governance practices and financial reporting standards for public companies. These new laws, rules and regulations, including compliance with Section 404 of the Sarbanes-Oxley Act of 2002 relating to internal control over financial reporting, referred to as Section 404, have materially increased our legal and financial compliance costs and made some activities more time-consuming and more burdensome. Section 404 requires that by 2007 our management assess our internal control over financial reporting annually and include a report on its assessment in our annual report. In 2008 our independent registered public accounting firm may be required to audit both the design and operating effectiveness of our internal control over financial reporting.

# **Risks Relating to Our Common Stock**

Stock prices for biotechnology companies have historically tended to be very volatile. Stock prices and trading volumes for many biotechnology companies fluctuate widely for a number of reasons, including but not limited to the following factors, some of which may be unrelated to their businesses or results of operations:

- clinical trial results
- the amount of cash resources and ability to obtain additional funding
- announcements of research activities, business developments, technological innovations or new products by companies or their competitors
- entering into or terminating strategic relationships
- changes in government regulation
- disputes concerning patents or proprietary rights
- changes in revenues or expense levels
- public concern regarding the safety, efficacy or other aspects of the products or methodologies being developed
- reports by securities analysts
- · activities of various interest groups or organizations
- media coverage
- status of the investment markets

This market volatility, as well as general domestic or international economic, market and political conditions, could materially and adversely affect the market price of our common stock and the return on your investment.

A significant number of shares of our common stock have or will become available for sale and their sale could depress the price of our common stock. On January 31, 2006, a significant number of our

outstanding securities that were previously restricted became eligible for sale under Rule 144 of the Securities Act. In addition, on January 31, 2007, a significant number of our outstanding securities that were previously restricted became eligible for sale under Rule 144(k) of the Securities Act, and their sale will not be subject to any volume limitations.

Not including the shares of common stock underlying the 2005 Debentures, the 2005 Warrants, the 2006 Debentures, the 2006 Warrants, and the replacement warrants, there are presently approximately 8,100,000 outstanding options, warrants and other securities convertible or exercisable into shares of our common stock.

We may also sell a substantial number of additional shares of our common stock in connection with a private placement or public offering of shares of our common stock (or other series or class of capital stock to be designated in the future). The terms of any such private placement would likely require us to register the resale of any shares of capital stock issued or issuable in the transaction. We have also issued common stock to certain parties, such as vendors and service providers, as payment for products and services. Under these arrangements, we may agree to register the shares for resale soon after their issuance. We may also continue to pay for certain goods and services with equity, which would dilute your interest in the company.

Sales of a substantial number of shares of our common stock under any of the circumstances described above could adversely affect the market price for our common stock and make it more difficult for you to sell shares of our common stock at times and prices that you feel are appropriate.

We do not intend to pay cash dividends on our common stock in the foreseeable future. Any payment of cash dividends will depend upon our financial condition, results of operations, capital requirements and other factors and will be at the discretion of our board of directors. We do not anticipate paying cash dividends on our common stock in the foreseeable future. Furthermore, we may incur additional indebtedness that may severely restrict or prohibit the payment of dividends.

Our securities are quoted on the OTC Bulletin Board, which may limit the liquidity and price of our securities more than if our securities were quoted or listed on the Nasdaq Stock Market or a national exchange. Our securities are currently quoted on the OTC Bulletin Board, an NASD-sponsored and operated inter-dealer automated quotation system for equity securities not included in the Nasdaq Stock Market. Quotation of our securities on the OTC Bulletin Board may limit the liquidity and price of our securities more than if our securities were quoted or listed on The Nasdaq Stock Market or a national exchange. Some investors may perceive our securities to be less attractive because they are traded in the over-the-counter market. In addition, as an OTC Bulletin Board listed company, we do not attract the extensive analyst coverage that accompanies companies listed on Nasdaq or any other regional or national exchange. Further, institutional and other investors may have investment guidelines that restrict or prohibit investing in securities traded in the over-the-counter market. These factors may have an adverse impact on the trading and price of our securities.

Our common stock is subject to penny stock regulations and restrictions on initial and secondary broker-dealer salesThe Securities and Exchange Commission has adopted regulations which generally define penny stock to be any listed, trading equity security that has a market price less than \$5.00 per share or an exercise price of less than \$5.00 per share, subject to certain exemptions. Penny stocks are subject to certain additional oversight and regulatory requirements. Brokers and dealers affecting transactions in our common stock in many circumstances must obtain the written consent of a customer prior to purchasing our common stock, must obtain information from the customer and must provide disclosures to the customer. These requirements may restrict the ability of broker-dealers to sell our common stock and may affect your ability to sell your shares of our common stock in the secondary market.

#### USE OF PROCEEDS

We will not receive proceeds from the sale of shares under this prospectus by the selling security holders. We may, however, receive the exercise price of the warrants if and when those warrants are exercised by the selling security holders. Whether we receive any proceeds depends upon whether the holders of the warrants utilize their cashless exercise rights. Such amounts, if any, that we receive upon exercise of the warrants will be used for general corporate purposes.

#### SELLING SECURITY HOLDERS

The securities are being offered by the named selling security holders below. The selling security holders hold common stock (or securities convertible or exercisable into common stock), the terms of which are described below under DESCRIPTION OF SECURITIES. The selling security holders may, from time to time, offer and sell any or all of the shares that are registered or will be registered under this prospectus, although they are not obligated to do so.

The shares of common stock listed in Selling Security Holder Table A are being registered for the first time pursuant to this Registration Statement. The shares of common stock listed in Selling Security Holder Table B were previously registered for resale on Registration Statement No. 333-129019, which was filed on October 14, 2005, originally declared effective on October 28, 2005, and subsequently amended. Pursuant to Rule 429 promulgated under the Securities Act of 1933, this prospectus and the registration statement of which it forms a part updates such Registration Statement.

The selling security holders listed in Selling Security Holder Table A below hold either (i) the 2006 Debentures, (ii) the 2006 Warrants, (iii) the 2005 Debentures, (iv) the 2005 Warrants, (v) the replacement 2005 Warrants, each of which are convertible or exercisable into shares of common stock, and/or (vi) common stock underlying the above-listed securities. These shares of common stock underlying the 2005 Debentures and the 2005 Warrants shown in Table B were previously registered for resale on Registration Statement No. 333-129019 which was filed on October 14, 2005. The selling security holders listed in Selling Security Holder Table B below each received (i) the 2005 Debentures, which are convertible into shares of our common stock, and (ii) the 2005 Warrants, which our exercisable into shares of common stock, in connection with the closing of the private placement in September 2005. As a result of certain contractual obligations, we are registering pursuant to this Registration Statement shares of common stock underlying these securities.

The last column of each of these tables assumes the sale of all of our shares offered by this prospectus listed in that table. The registration of the offered shares does not mean that any or all of the selling security holders will offer or sell any of these shares. Except as set forth in the notes to these tables, there is not nor has there been a material relationship between us and any of the selling stockholders within the past three years. We believe, based on information supplied by the following selling security holders, that the natural persons named in the Information Regarding Institutional Selling Security Holders section of this prospectus following these tables exercise the sole or shared voting and/or dispositive powers with respect to the shares registered for resale in this prospectus.

#### SELLING SECURITY HOLDER TABLE A

### (CURRENT REGISTRATION SHARES)

Name	Total Shares of Common Stock Owned as of the date of this Prospectus(1)	Shares of Common Stock Included in Prospectus(2)	Common Stock Owned After Completion of Offering(1)	Percentage of Common Stock Owned After Completion of Offering(3)
Newberg Family Trust UTD 12/18/90(4)	2,678,832	396.115	2.282.717	1.9 %
JMB Capital Partners, LP(5)	7,364,434	959,086	6,405,348	5.3 %
Jay Goldman Master Limited Partnership(6)	7,799,934	1,188,345	6,611,589	5.5 %
CAMOFI Master LDC(7)	4,749,211	772,333	3,976,878	3.3 %
Shapiro Family Trust Dated September 25, 1989(8)	1,071,530	158,446	913,084	0.8 %
G. Tyler Runnels or Jasmine Niklas Runnels TTEES The	,,	, -	,	
Runnels Family Trust dtd 1-11-2000(9)	789,689	95,113	694,576	0.6 %
High Tide, LLC(10)	789,689	95,113	694,576	0.6 %
JMG Triton Offshore Fund, Ltd.(11)	5,131,708	682,800	4,448,908	3.7 %
JMG Capital Partners, LP(12)	5,233,158	712,644	4,520,514	3.7 %
Cranshire Capital, LP(13)	1,575,105	237,669	1,337,436	1.1 %
MM & B Holdings, a California general partnership(14)	5,163,436	657,816	4,505,620	3.7 %
JGB Capital, LP(15)	2,106,627	310,921	1,795,706	1.5 %
Bristol Investment Fund, Ltd.(16)	11,427,529	1,588,646	9,838,882	8.1 %
Overbrook Fund I, LLC(17)	985,110	158,446	826,664	0.7 %
Portside Growth and Opportunity Fund(18)	5,590,750	811,201	4,779,549	3.8 %
Rockmore Investment Master Fund Ltd.(19)	1,524,180	253,607	1,270,573	1.1 %
Omicron Master Trust(20)	215,255	25,054	190,201	0.2 %
Smithfield Fiduciary, LLC(21)	2,629,030	396,115	2,232,915	1.8 %
Alpha Capital(22)	2,244,530	317,044	1,927,486	1.6 %
Midsummer Investment, Ltd.(23)	3,880,306	633,784	3,246,522	2.7 %
Bushido Capital Master Fund, LP(24)	1,206,671	198,058	1,008,613	0.8 %
John A. Kryzanowski(25)	2,143,066	316,892	1,826,174	1.5 %
DAFNA LifeScience, Ltd.(26)	1,253,364	100,521	1,152,843	1.0 %
Whalehaven Capital Fund Limited(27)	3,536,091	589,159	2,946,932	2.4 %
Stonestreet, LP(28)	362,235	51,749	310,486	0.3 %
Anthem Ventures Fund, LP(29)	7,257,681	792,230	6,465,451	5.3 %
Evan S. Malik(30)	251,119	39,612	211,507	0.2 %
Gamma Opportunity Fund Capital Partners LP				
Class A(31)	571,910	79,261	492,649	0.4 %
Gamma Opportunity Fund Capital Partners LP				
Class C(32)	571,908	79,261	492,647	0.4 %
T.R. Winston Company, LLC(33)	6,318,881	819,326	5,499,555	4.5 %

These totals are based on selling security holder information on or about March 1, 2007, and assume full conversion of debentures and exercise of warrants. Some of the shares of common stock underlying the debentures and warrants included in these totals may have already been sold, transferred or disposed of by the selling security holders. The number of shares of common stock shown in the first column includes (A) shares of common stock underlying (i) convertible debentures issued in 2006 in the aggregate original principal amount of \$10,981,250, convertible at a conversion price of \$0.288, (ii) common stock purchase warrants issued in 2006 at an exercise price of \$0.3168,

- (iii) common stock purchase warrants, with an exercise price of \$0.3168, issued to a broker-dealer as commissions paid in connection with the private placement of the 2006 debentures and the 2006 warrants, (iv) convertible debentures issued in 2005 in the aggregate principal amount of \$22,276,250, convertible at a conversion price of \$0.90, and/or (v) common stock purchase warrants issued in 2005 at an exercise price of either \$0.95 or \$0.90, and (B) shares of common stock issued upon conversion, redemption, and/or exercise of the above referenced securities. The number of shares of common stock shown in the third column represents the difference between the number of shares shown in the first column and the number of shares shown in the second column.
- The number of shares of common stock included in the second column represents shares of common stock underlying (i) convertible debentures issued in 2006 in the aggregate original principal amount of \$10,981,250, convertible at a conversion price of \$0.288, (ii) common stock purchase warrants issued in 2006 at an exercise price of \$0.3168, (iii) common stock purchase warrants, with an exercise price of \$0.3168, issued to a broker-dealer as commissions paid in connection with the private placement of the 2006 debentures and the 2006 warrants, (iv) convertible debentures issued in 2005 in the aggregate principal amount of \$22,276,250, convertible at a conversion price of \$0.90, and/or (v) common stock purchase warrants issued in 2005 at an exercise price of either \$0.95 or \$0.90.
- Each selling security holder's percentage of ownership after the sale of all shares of common stock covered by this prospectus is based on (i) the number of shares of common stock outstanding as of March 1, 2007, plus (ii) the number of shares of common stock issuable upon conversion of the 2005 Debentures and the 2006 Debentures and upon exercise of the 2005 Warrants, the 2006 Warrants, and the replacement warrants, as of March 1, 2007. Some of the shares of common stock underlying the debentures and warrants included in these totals may have already been sold, transferred or disposed of by the selling security holders. Each selling security holder has contractually agreed to restrict its ability to convert the debentures, exercise the warrants and additional investment rights and receive shares of our common stock such that the number of shares of our common stock held by each such selling security holder and its affiliates after such conversion or exercise does not exceed 4.99% of the number of shares of our common stock outstanding immediately after giving effect to such conversion or exercise.
- The number of shares of common stock shown in the first column represents (i) 345,092 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 136,413 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 1,089,410 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 544,705 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 563,212 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- The number of shares of common stock shown in the first column represents (i) 409,239 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (ii) 3,268,229 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 1,634,114 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 2,052,852 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- The number of shares of common stock shown in the first column represents (i) 1,135,278 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 409,239 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 3,268,229 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 1,634,114 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 1,353,074 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.

- The number of shares of common stock shown in the first column represents (i) 123,519 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 272,826 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 2,178,819 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 1,089,409 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 1,084,638 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (8) The number of shares of common stock shown in the first column represents (i) 158,037 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 54,565 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 435,764 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 217,882 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 205,282 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- Alan C. Shapiro may be deemed the beneficial owner of these securities and is a director of Advanced Cell Technology, Inc. As of March 1, 2007, Dr. Shapiro owned 87,063 shares of common stock and 100,000 shares of common stock subject to stock options that were currently exercisable or exercisable within 60 days of December 31, 2006.
- (9) The number of shares of common stock shown in the first column represents (i) 40,924 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (ii) 326,823 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 163,411 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 258,531 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (10) The number of shares of common stock shown in the first column represents (i) 40,924 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (ii) 326,823 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 163,411 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 258,531 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (11) The number of shares of common stock shown in the first column represents (i) 179,074 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 272,826 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 2,178,819 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 1,089,410 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 1,411,579 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- The number of shares of common stock shown in the first column represents (i) 345,741 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 272,826 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 2,178,819 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 1,089,410 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 1,346,362 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (13) The number of shares of common stock shown in the first column represents (i) 81,848 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (ii) 653,646 shares of common

stock issuable upon conversion of a 2006 Debenture, (iii) 326,823 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 512,788 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.

- (14) The number of shares of common stock shown in the first column represents (i) 39,553 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 272,826 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 2,178,819 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 1,089,410 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 1,582,828 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (15) The number of shares of common stock shown in the first column represents (i) 481,528 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 204,620 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 653,646 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 326,823 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 440,010 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (16) The number of shares of common stock shown in the first column represents (i) 355,357 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 545,652 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 5,338,108 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 2,669,054 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 2,519,358 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (17) The number of shares of common stock shown in the first column represents (i) 54,565 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (ii) 435,764 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 217,882 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 276,899 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (18) The number of shares of common stock shown in the first column represents (i) 440,013 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 186,395 shares of common stock issuable upon exercise of a 2005 Warrant, (iii) 136,413 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iv) 2,577,979 shares of common stock issuable upon conversion of a 2006 Debenture, (v) 1,288,990 shares of common stock issuable upon exercise of a 2006 Warrant, and (vi) an aggregate of 960,960 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (19) The number of shares of common stock shown in the first column represents (i) 21,962 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 86,422 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 690,250 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 345,125 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 380,421 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.

- (20) The number of shares of common stock shown in the first column represents (i) 186,404 shares of common stock issuable upon conversion of a 2005 Warrant and (ii) an aggregate of 28,851 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (21) The number of shares of common stock shown in the first column represents (i) 285,092 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 136,413 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 1,089,410 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 544,705 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 573,410 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (22) The number of shares of common stock shown in the first column represents (i) 136,413 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (ii) 1,089,410 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 544,705 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 474,004 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (23) The number of shares of common stock shown in the first column represents (i) 632,148 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 218,261 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 1,743,056 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 871,527 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 415,314 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (24) The number of shares of common stock shown in the first column represents (i) 197,546 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 68,207 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 544,705 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 272,353 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 123,860 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (25) The number of shares of common stock shown in the first column represents (i) 316,074 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 109,130 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 871,528 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 435,764 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 410,570 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (26) The number of shares of common stock shown in the first column represents (i) 68,207 shares of common stock issuable upon exercise of a 2005 Warrant, (ii) 272,353 shares of common stock issuable upon exercise of a 2006 Warrant, and (iii) an aggregate of 912,804 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture held by the security holder.
- (27) The number of shares of common stock shown in the first column represents (i) 329,639 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 204,620 shares of common stock issuable upon exercise of a 2005 Warrant, (iii) 1,634,115 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 817,058 shares of common stock issuable upon exercise of a 2006

Warrant, and (v) an aggregate of 550,660 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture held by the security holder.

- (28) The number of shares of common stock shown in the first column represents (i) 197,546 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 68,207 shares of common stock issuable upon exercise of a 2005 Warrant, and (iii) an aggregate of 96,482 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture held by the security holder.
- (29) The number of shares of common stock shown in the first column represents (i) 790,186 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 272,826 shares of common stock issuable upon exercise of a 2005 Warrant, (iii) 2,178,819 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 1,089,409 shares of common stock issuable upon exercise of a 2006 Warrant, (v) an aggregate of 318,752 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture held by the security holder, and (vi) 2,607,689 shares of common stock (a) held by the selling security holder and certain of its affiliates as of March 1, 2007 and (b) issuable upon exercise of warrants issued in 2004 to the selling security holder and certain of its affiliates, unrelated to the September 2005 and September 2006 financings.

As of December 31, 2006, Anthem Ventures Fund, LP was the beneficial owner of 11.2% of our outstanding common stock.

- (30) The number of shares of common stock shown in the first column represents (i) 39,509 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 13,641 shares of common stock issuable upon exercise of a 2005 Warrant, (iii) 108,941 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 54,471 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 34,557 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture held by the security holder.
- (31) The number of shares of common stock shown in the first column represents (i) 34,103 shares of common stock issuable upon exercise of a 2005 Warrant, (ii) 272,354 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 136,176 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 129,277 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture held by the security holder.
- (32) The number of shares of common stock shown in the first column represents (i) 34,104 shares of common stock issuable upon exercise of a 2005 Warrant, (ii) 272,351 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 136,176 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 129,277 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture held by the security holder.
- (33) The number of shares of common stock shown in the first column represents (i) 581,120 shares of common stock issuable upon exercise of a 2005 Warrant, (ii) 581,120 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 4,575,521 shares of common stock issuable upon exercise of a common stock purchase warrant with an exercise price of \$0.3168, and (iv) 581,120 shares of common stock issued upon the exercise of a 2005 Warrant held by the security holder.

T.R	<ul> <li>Winston &amp; Company,</li> </ul>	, LLC provided broker	services to us in con	nection with the Se	ptember 2005 financii	ng, the warrant repricin	g, and the September 200
fina	ncing.						

#### SELLING SECURITY HOLDER TABLE B

#### (PREVIOUSLY REGISTERED SHARES)

Name	Total Shares of Common Stock Owned as of the date of this Prospectus(1)	Shares of Common Stock Included in Prospectus(2)	Common Stock Owned After Completion of Offering(1)	Percentage of Common Stock Owned After Completion of Offering(3)
Newberg Family Trust UTD 12/18/90(4)	2,678,832	532,011	2,115,620	1.8 %
JMB Capital Partners, LP(5)	7,364,434	1,596,033	5,311,582	4.4 %
Jay Goldman Master Limited Partnership(6)	7,799,934	1,596,033	6,203,901	5.1 %
CAMOFI Master LDC(7)	4,749,211	1,064,022	3,664,573	3.0 %
Shapiro Family Trust Dated September 25, 1989(8)	1,071,530	212,803	858,726	0.7 %
G. Tyler Runnels or Jasmine Niklas Runnels TTEES The Runnels Family				
Trust dtd 1-11-2000(9)	789,689	159,603	531,158	0.4 %
High Tide, LLC(10)	789,689	159,603	531,158	0.4 %
JMG Triton Offshore Fund, Ltd.(11)	5,131,708	1,064,022	3,720,130	3.1 %
JMG Capital Partners, LP(12)	5,233,158	1,064,022	3,886,796	3.2 %
Cranshire Capital, LP(13)	1,575,105	319,207	1,062,317	0.9 %
MM & B Holdings, a California general partnership(14)	5,163,436	1,064,022	3,580,608	3.0 %
JGB Capital, LP(15)	2,106,627	798,016	1,308,611	1.1 %
Bristol Investment Fund, Ltd.(16)	11,427,529	2,128,043	8,908,171	7.4 %
Overbrook Fund I, LLC(17)	985,110	212,804	708,211	0.6 %
Portside Growth and Opportunity Fund(18)	5,590,750	1,052,874	4,629,790	3.6 %
Rockmore Investment Master Trust Ltd.(19)	1,524,180	327,904	1,143,759	0.9 %
Omicron Master Trust(20)	215,255	215,255		0.0 %
Smithfield Fiduciary, LLC(21)	2,629,030	532,011	2,055,620	1.7 %
Alpha Capital(22)	2,244,530	532,011	1,770,528	1.5 %
Midsummer Investment, Ltd.(23)	3,880,306	851,217	3,029,089	2.5 %
Bushido Capital Master Fund, LP(24)	1,206,671	266,005	940,665	0.8 %
John A. Kryzanowski(25)	2,143,066	425,609	1,717,457	1.4 %
DAFNA LifeScience, Ltd.(26)	1,253,364	266,005	340,560	0.3 %
Whalehaven Capital Fund Limited(27)	3,536,091	798,016	2,738,075	2.3 %
Stonestreet, LP(28)	362,235	266,005	96,229	0.1 %
Anthem Ventures Fund, LP(29)	7,257,681	1,064,022	6,193,660	5.1 %
Evan S. Malik(30)	251,119	53,201	197,918	0.2 %
Gamma Opportunity Fund Capital Partners LP Class A(31)	571,910	133,003	442,633	0.4 %
Gamma Opportunity Fund Capital Partners LP Class C(32)	571,908	133,003	442,631	0.4 %
T.R. Winston & Company, LLC(33)	6,318,881	1,510,911	5,156,641	4.3 %

<sup>(1)</sup> These totals are based on selling security holder information on or about March 1, 2007, and assume full conversion of debentures and exercise of warrants. Some of the shares of common stock underlying the debentures and warrants included in these totals may have already been sold, transferred or disposed of by the selling security holders. The number of shares of common stock shown in the first column includes (A) shares of common stock underlying (i) convertible debentures issued in 2006 in the aggregate original principal amount of \$10,981,250, convertible at a conversion price of \$0.288, (ii) common stock purchase warrants issued in 2006 at an exercise price of \$0.3168, (iii) common stock purchase warrants, with an exercise price of \$0.3168, issued to a broker-dealer as commissions paid in connection with the private placement of the 2006 debentures and the 2006 warrants, (iv) convertible debentures issued in 2005 in the aggregate principal amount of \$22,276,250, convertible at a conversion price of \$0.90, and/or (v) common stock purchase warrants issued in 2005 at an exercise price of either \$0.95 or \$0.90, and (B) shares of common stock issued upon conversion, redemption, and/or exercise of the above referenced securities. The number of shares shown in the third column represents the difference between the number of shares shown in the first column and the number of shares shown in the second column; provided,

however, the number of shares shown in the third column does not include those shares that have been issued to each selling security holder which are not salable on a resale basis pursuant to a prospectus included in an effective registration statement (which such shares are included in the first column).

- (2) Pursuant to a registration rights agreement with the selling security holders, we were required to register and to include in this prospectus 130% of the number of shares into which the 2005 Debentures and the 2005 Warrants held by the selling security holders could be converted and/or exercised. All or a portion of the shares of common stock identified in this column with respect to each selling security holder may have previously been sold as of March 1, 2007.
- (3) Each selling security holder's percentage of ownership after the sale of all shares of common stock covered by this prospectus is based on (i) the number of shares of common stock outstanding as of March 1, 2007, plus (ii) the number of shares of common stock issuable upon conversion of the 2005 Debentures and the 2006 Debentures and upon exercise of the 2005 Warrants, the 2006 Warrants, and the replacement warrants, as of March 1, 2007. Some of the shares of common stock underlying the debentures and warrants included in these totals may have already been sold, transferred or disposed of by the selling security holders. Each selling security holder has contractually agreed to restrict its ability to convert the debentures, exercise the warrants and additional investment rights and receive shares of our common stock such that the number of shares of our common stock held by each such selling security holder and its affiliates after such conversion or exercise does not exceed 4.99% of the number of shares of our common stock outstanding immediately after giving effect to such conversion or exercise.
- (4) The number of shares of common stock shown in the first column represents (i) 345,092 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 136,413 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 1,089,410 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 544,705 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 563,212 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (5) The number of shares of common stock shown in the first column represents (i) 409,239 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (ii) 3,268,229 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 1,634,114 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 2,052,852 shares of common stock issued upon conversion and /or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (6) The number of shares of common stock shown in the first column represents (i) 1,135,278 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 409,239 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 3,268,229 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 1,634,114 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 1,353,074 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (7) The number of shares of common stock shown in the first column represents (i) 123,519 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 272,826 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 2,178,819 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 1,089,409 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 1,084,638 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (8) The number of shares of common stock shown in the first column represents (i) 158,037 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 54,565 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 435,764 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 217,882 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 205,282 shares of common stock issued upon conversion and /or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.

Alan C. Shapiro may be deemed the beneficial owner of these securities and is a director of Advanced Cell Technology, Inc. As of March 1, 2007, Dr. Shapiro owned 87,063 shares of common stock and 100,000 shares of

common stock subject to stock options that were currently exercisable or exercisable within 60 days of December 31, 2006.

- (9) The number of shares of common stock shown in the first column represents (i) 40,924 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (ii) 326,823 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 163,411 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 258,531 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (10) The number of shares of common stock shown in the first column represents (i) 40,924 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (ii) 326,823 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 163,411 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 258,531 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (11) The number of shares of common stock shown in the first column represents (i) 179,074 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 272,826 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 2,178,819 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 1,089,410 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 1,411,579 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (12) The number of shares of common stock shown in the first column represents (i) 345,741 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 272,826 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 2,178,819 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 1,089,410 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 1,346,362 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (13) The number of shares of common stock shown in the first column represents (i) 81,848 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (ii) 653,646 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 326,823 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 512,788 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (14) The number of shares of common stock shown in the first column represents (i) 39,553 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 272,826 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 2,178,819 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 1,089,410 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 1,582,828 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (15) The number of shares of common stock shown in the first column represents (i) 481,528 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 204,620 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 653,646 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 326,823 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 440,010 shares of common stock issued upon conversion and /or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (16) The number of shares of common stock shown in the first column represents (i) 355,357 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 545,652 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 5,338,108 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 2,669,054 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 2,519,358 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (17) The number of shares of common stock shown in the first column represents (i) 54,565 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (ii) 435,764 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 217,882 shares of common stock issuable upon exercise of a 2006 Warrant,

and (iv) an aggregate of 276,899 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.

- (18) The number of shares of common stock shown in the first column represents (i) 440,013 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 186,395 shares of common stock issuable upon exercise of a 2005 Warrant, (iii) 136,413 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iv) 2,577,979 shares of common stock issuable upon conversion of a 2006 Debenture, (v) 1,288,990 shares of common stock issuable upon exercise of a 2006 Warrant, and (vi) an aggregate of 960,960 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (19) The number of shares of common stock shown in the first column represents (i) 21,962 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 86,422 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 690,250 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 345,125 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 380,421 shares of common stock issued upon conversion and /or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (20) The number of shares of common stock shown in the first column represents (i) 186,404 shares of common stock issuable upon conversion of a 2005 Warrant and (ii) an aggregate of 28,851 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (21) The number of shares of common stock shown in the first column represents (i) 285,092 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 136,413 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 1,089,410 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 544,705 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 573,410 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (22) The number of shares of common stock shown in the first column represents (i) 136,413 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (ii) 1,089,410 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 544,705 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 474,004 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (23) The number of shares of common stock shown in the first column represents (i) 632,148 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 218,261 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 1,743,056 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 871,527 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 415,314 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (24) The number of shares of common stock shown in the first column represents (i) 197,546 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 68,207 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 544,705 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 272,353 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 123,860 shares of common stock issued upon conversion and /or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (25) The number of shares of common stock shown in the first column represents (i) 316,074 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 109,130 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 871,528 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 435,764 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 410,570 shares of common stock issued upon conversion and /or monthly redemption of a 2005 Debenture and/or the exercise of a 2005 Warrant held by the security holder.
- (26) The number of shares of common stock shown in the first column represents (i) 68,207 shares of common stock issuable upon exercise of a 2005 Warrant, (ii) 272,353 shares of common stock issuable upon exercise of a

2006 Warrant, and (iii) an aggregate of 912,804 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture held by the security holder.

- (27) The number of shares of common stock shown in the first column represents (i) 329,639 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 204,620 shares of common stock issuable upon exercise of a 2006 Warrant, (iii) 1,634,115 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 817,058 shares of common stock issuable upon exercise of a 2006 Warrant, and (v) an aggregate of 550,660 shares of common stock issuadu upon conversion and/or monthly redemption of a 2005 Debenture held by the security holder.
- (28) The number of shares of common stock shown in the first column represents (i) 197,546 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 68,207 shares of common stock issuable upon exercise of a 2005 Warrant, and (iii) an aggregate of 96,482 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture held by the security holder.
- (29) The number of shares of common stock shown in the first column represents (i) 790,186 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 272,826 shares of common stock issuable upon exercise of a 2005 Warrant, (iii) 2,178,819 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 1,089,409 shares of common stock issuable upon exercise of a 2006 Warrant, (v) an aggregate of 318,752 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture held by the security holder, and (vi) 2,607,689 shares of common stock (a) held by the selling security holder and certain of its affiliates as of March 1, 2007 and (b) issuable upon exercise of warrants issued in 2004 to the selling security holder and certain of its affiliates, unrelated to the September 2005 and September 2006 financings.
- (30) The number of shares of common stock shown in the first column represents (i) 39,509 shares of common stock issuable upon conversion of a 2005 Debenture, (ii) 13,641 shares of common stock issuable upon exercise of a 2005 Warrant, (iii) 108,941 shares of common stock issuable upon conversion of a 2006 Debenture, (iv) 54,471 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 34,557 shares of common stock issuadu upon conversion and/or monthly redemption of a 2005 Debenture held by the security holder.

As of December 31, 2006, Anthem Ventures Fund, LP was the beneficial owner of 11.2% of our outstanding common stock.

- (31) The number of shares of common stock shown in the first column represents (i) 34,103 shares of common stock issuable upon exercise of a 2005 Warrant, (ii) 272,354 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 136,176 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 129,277 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture held by the security holder.
- (32) The number of shares of common stock shown in the first column represents (i) 34,104 shares of common stock issuable upon exercise of a 2005 Warrant, (ii) 272,351 shares of common stock issuable upon conversion of a 2006 Debenture, (iii) 136,176 shares of common stock issuable upon exercise of a 2006 Warrant, and (iv) an aggregate of 129,277 shares of common stock issued upon conversion and/or monthly redemption of a 2005 Debenture held by the security holder.
- (33) The number of shares of common stock shown in the first column represents (i) 581,120 shares of common stock issuable upon exercise of a 2005 Warrant, (ii) 581,120 shares of common stock issuable upon exercise of a replacement 2005 Warrant, (iii) 4,575,521 shares of common stock issuable upon exercise of a common stock purchase warrant with an exercise price of \$0.3168, and (iv) 581,120 shares of common stock issued upon the exercise of a 2005 Warrant held by the security holder.
- T.R. Winston & Company, LLC provided broker services to us in connection with the September 2005 financing, the warrant repricing, and the September 2006 financing.

#### **Additional Disclosure**

Dollar Value of Underlying Securities Registered for Resale in this Prospectus

The total dollar value of the securities underlying the 2005 Debentures and the 2006 Debentures that we have registered for resale (using the number of underlying securities that we have registered for resale and the market price per share for those securities on the date of the sale of the 2005 Debentures and 2006 Debentures, respectively) are as follows:

#### September 2005 Financing

Shares of Common Stock Underlying 2005 Debentures Registered for Resale*:	9,68	5,326
Market Price per Share of Common Stock on September 15, 2005:	\$	2.20
Dollar Value of Underlying Securities:	\$	21,307,717

<sup>\*</sup> This amount does not include an additional number of shares that were registered for resale in excess of the actual number of shares underlying the 2005 Debentures, in accordance with our contractual obligations.

#### September 2006 Financing

Shares of Common Stock Underlying 2006 Debentures Registered for Resale*:	13,51	6,367
Market Price per Share of Common Stock on September 6, 2006:	\$	0.81
Dollar Value of Underlying Securities:	\$	10,948,257

<sup>\*</sup> These registered shares are available for resale upon conversion and/or redemption of the 2006 Debentures, as well as upon (i) conversion and/or redemption of the 2005 Debentures and (ii) exercise of the 2005 Warrants, the 2006 Warrants and the Replacement Warrants.

Payments Made in Connection with September 2005 Financing and September 2006 Financing

The following tables disclose the dollar amount of each payment (including the value of any payments to be made in common stock) in connection with the September 2005 financing and the September 2006 financing that we have made or may be required to make to any selling security holder, any affiliate of a selling security holder, or any person with whom any selling security holder has a contractual relationship regarding the transaction (including any interest payments, liquidated damages, payments made to finders or placement agents, and any other payments or potential payments). The net proceeds to the Company from the sale of the 2005 Debentures and the 2006 Debentures and the total possible payments to all selling security holders and any of their affiliates in the first year following the sale of the 2005 Debentures and the 2006 Debentures, respectively, are also provided.

#### September 2005 Financing

	Type of	Amount/Value
Payee	Payment	of Payment
T.R Winston & Company, LLC(1)	Cash	\$ 1,065,000
	Warrant(2)	\$ 1,379,000
Feldman & Weinstein(3)	Cash	\$ 20,000
Total Possible Payments to all Selling Security Holders and Any of		
Their Affiliates in First Year:		\$ 2,464,000
Net Proceeds from 2005 Debentures:		\$ 15,286,000

- (1) T.R. Winston & Company, LLC served as the placement agent for the securities sold in the September 2005 financing.
- On September 15, 2005, we issued a warrant to purchase 1,162,239 shares of common stock at an exercise price of \$2.53 per share to T.R. Winston & Company, LLC in connection with the September 2005 financing. The market price per share on the date of issuance was \$2.20. The initial fair value of the warrant was estimated at approximately \$1,379,000 using the Black Scholes pricing model. The assumptions used in the Black Scholes model are as follows: (1) dividend yield of 0%; (2) expected volatility of 64%, (3) risk-free interest rate of 3.99%, and (4) expected life of 5 years.
- (3) Feldman & Weinstein served as counsel to the selling security holders in connection with the September 2005 financing.

# September 2006 Financing

Payee	Type of Payment	Amount/Value of Payment
T.R Winston & Company, LLC(1)	Cash	\$ 783,875
	Warrant(2)	\$ 3,600,000
Total Possible Payments to all Selling Security Holders and Any of		
Their Affiliates in First Year:		\$ 4,383,875
Net Proceeds from 2006 Debentures:		\$ 3,866,125 (3)

- (1) T.R. Winston & Company, LLC served as the placement agent for the securities sold in the September 2006 financing.
- On September 6, 2006, we issued a warrant to purchase 4,575,521 shares of common stock at an exercise price of \$0.3168 per share to T.R. Winston & Company, LLC in connection with the September 2006 financing and the warrant repricing. The market price per share on the date of issuance was \$0.81. The initial fair value of the warrant was estimated at approximately \$3,600,000 using the Black Scholes pricing model. The assumptions used in the Black Scholes model are as follows: (1) dividend yield of 0%, (2) expected volatility of 176%, (3) risk-free interest rate of 4.81%, and (4) expected life of 5 years.
- (3) The value of the warrant issued to T.R. Winston & Company, LLC described in footnote 2 includes the value of the portion of the warrant issued to T.R. Winston & Company, LLC as consideration for services provided to the Company in connection with the warrant repricing. The net proceeds line item does not, however, include \$4,314,589 in proceeds received by the Company as a result of the exercise of certain of the 2005 Warrants in connection with the warrant repricing.

Potential Profits on Conversion of 2005 Debentures and 2006 Debentures

The following tables show the total possible profit that the selling security holders could realize as a result of the conversion discount for the securities underlying the 2005 Debentures and the 2006 Debentures.

#### September 2005 Financing

	•	Price re of Comm n Closing	Conversion onPrice of 2005	Total Possible Shares Underlying	Combined Market Price of Shares Underlying 2005	Combined Conversion Price of Shares Underlying 2005	Total Possible Discount to Market
Selling Security Holder	Date	crossing		)2005 Debentures	Debentures	Debentures	Price(2)
Newberg Family Trust UTD	Dutt		Descritar es(1	)2000 Descritares	Descritures	Descritares	11100(2)
12/18/90	\$	2.20	\$ 2.30	272,826	\$ 600.217	\$ 627,500	\$ (27,283 )
JMB Capital Partners, LP	\$	2.20	\$ 2.30	818,478	\$ 1,800,652	\$ 1,882,500	\$ (81,848 )
Jay Goldman Master Limited	Ψ	2.20	Ψ 2.30	010,170	Ψ 1,000,032	ψ 1,00 <b>2</b> ,500	ψ (01,010 )
Partnership	\$	2.20	\$ 2.30	818,478	\$ 1,800,652	\$ 1,882,500	\$ (81,848 )
CAMOFI Master LDC	\$	2.20	\$ 2.30	545,652	\$ 1,200,435	\$ 1,255,000	\$ (54,565 )
Shapiro Family Trust Dated	Ψ	2.20	Ψ 2.30	545,052	Ψ 1,200,433	Ψ 1,233,000	Ψ (34,303 )
September 25, 1989	\$	2.20	\$ 2.30	109,130	\$ 240,087	\$ 251,000	\$ (10,913 )
G. Tyler Runnels or Jasmine	Ψ	2.20	Ψ 2.30	107,130	Ψ 2-10,007	Ψ 251,000	ψ (10,713 )
Niklas Runnels TTEES The							
Runnels Family Trust dtd							
1-11-2000	\$	2.20	\$ 2.30	81,848	\$ 180,065	\$ 188,250	\$ (8,185)
High Tide, LLC	\$	2.20	\$ 2.30	81,848	\$ 180,065	\$ 188,250	\$ (8,185)
JMG Triton Offshore Fund,	φ	2.20	\$ 2.30	01,040	φ 160,003	\$ 100,230	\$ (0,103)
Ltd.	\$	2.20	\$ 2.30	545,652	\$ 1,200,435	\$ 1,255,000	\$ (54,565 )
	\$	2.20	\$ 2.30	545,652	\$ 1,200,435	\$ 1,255,000	\$ (54,565)
JMG Capital Partners, LP	\$	2.20	\$ 2.30	163,696	\$ 1,200,433	\$ 1,233,000	, , ,
Cranshire Capital, LP MM & B Holdings, a	Ф	2.20	\$ 2.30	105,090	\$ 500,150	\$ 370,300	\$ (16,370 )
$\mathcal{E}$ ,	¢	2.20	\$ 2.30	E 1 E ( E )	¢ 1 200 425	¢ 1.255.000	¢ (EAECE )
California general partnership	\$	2.20		545,652	\$ 1,200,435	\$ 1,255,000	\$ (54,565 ) \$ (40,924 )
JGB Capital, LP	\$	2.20 2.20	\$ 2.30	409,239	\$ 900,326	\$ 941,250	Ψ (10,721 )
Bristol Investment Fund, Ltd.	\$		\$ 2.30	1,091,304	\$ 2,400,870	\$ 2,510,000	\$ (109,130 )
Overbrook Fund I, LLC	\$	2.20	\$ 2.30	109,130	\$ 240,087	\$ 251,000	\$ (10,913 )
Portside Growth and	ф	2.20	¢ 2.20	272.026	¢ (00.217	¢ (27.500	¢ (07.000 )
Opportunity Fund	\$	2.20	\$ 2.30	272,826	\$ 600,217	\$ 627,500	\$ (27,283 )
Rockmore Investment Master	ф	2.20	¢ 2.20		ф	ф	¢.
Fund Ltd.	\$	2.20	\$ 2.30		\$	\$	\$
Omicron Master Trust	\$	2.20	\$ 2.30	272.027	\$ 1,200,435	\$ 1,255,000	\$ (54,565 )
Smithfield Fiduciary, LLC	\$	2.20	\$ 2.30	272,826	\$ 600,217	\$ 627,500	\$ (27,283 )
Alpha Capital	\$	2.20	\$ 2.30	272,826	\$ 600,217	\$ 627,500	\$ (27,283 )
Midsummer Investment, Ltd.	\$	2.20	\$ 2.30	436,522	\$ 960,348	\$ 1,004,000	\$ (43,652 )
Bushido Capital Master Fund,				126.112		A 242.770	h (10 (11 )
LP	\$	2.20	\$ 2.30	136,413	\$ 300,109	\$ 313,750	\$ (13,641 )
John A. Kryzanowski	\$	2.20	\$ 2.30	218,261	\$ 480,174	\$ 502,000	\$ (21,826 )
DAFNA LifeScience, Ltd.	\$	2.20	\$ 2.30	136,413	\$ 300,109	\$ 313,750	\$ (13,641 )
Whalehaven Capital Fund	_						
Limited	\$	2.20	\$ 2.30	409,239	\$ 900,326	\$ 941,250	\$ (40,924 )
Stonestreet, LP	\$	2.20	\$ 2.30	136,413	\$ 300,109	\$ 313,750	\$ (13,641 )
Anthem Ventures Fund, LP	\$	2.20	\$ 2.30	545,652	\$ 1,200,435	\$ 1,255,000	\$ (54,565 )
Evan S. Malik	\$	2.20	\$ 2.30	27,283	\$ 60,022	\$ 62,750	\$ (2,728 )
Gamma Opportunity Fund							
Capital Partners LP Class A	\$	2.20	\$ 2.30	68,207	\$ 150,054	\$ 156,875	\$ (6,821 )
Gamma Opportunity Fund							
Capital Partners LP Class C	\$	2.20	\$ 2.30	68,207	\$ 150,054	\$ 156,875	\$ (6,821 )
T.R. Winston &							
Company LLC					\$	\$	\$
Total				9,139,673	\$ 21,307,717	\$ 22,276,250	\$ (968,533 )

<sup>(1)</sup> In connection with an amendment to the 2005 Debenture financing documents executed on January 11, 2007, the conversion price of the 2005 Debentures was reduced from \$2.30 to \$0.90. On January 11, 2007, the market price per share of our common stock was \$0.86.

<sup>(2)</sup> This amount does not include Original Issue Discount.

# **September 2006 Financing**

	Mark	et Price	per		Combined Market	Combined Conversion Price	Total Possible
				PriceTotal Possible	Price of Shares	of Shares	Discount
		on Clos	ing of 2006	Shares Underlying	Underlying 2006	Underlying 2006	to Market
Selling Security Holder	Date		Debentures	2006 Debentures	Debentures	Debentures	Price*
Newberg Family Trust UTD	ф	0.01	e 0.200	1 000 410	¢ 002 422	e 212.750	¢ 560.670
12/18/90	\$	0.81	\$ 0.288	1,089,410	\$ 882,422	\$ 313,750	\$ 568,672
JMB Capital Partners, LP	\$	0.81	\$ 0.288	3,268,229	\$ 2,647,265	\$ 941,250	\$ 1,706,015
Jay Goldman Master Limited	Ф	0.01	e 0.200	2.060.000	ф. 0.647.065	¢ 041.250	d 1.707.015
Partnership CAMOFI Master LDC	\$ \$	0.81	\$ 0.288 \$ 0.288	3,268,229 2,178,819	\$ 2,647,265 \$ 1,764,843	\$ 941,250 \$ 627,500	\$ 1,706,015
	Ф	0.81	\$ 0.288	2,178,819	\$ 1,704,843	\$ 027,300	\$ 1,137,343
Shapiro Family Trust Dated	¢.	0.81	\$ 0.288	125 761	¢ 252.000	¢ 105.500	¢ 227.460
September 25, 1989	Э	0.81	\$ 0.288	435,764	\$ 352,969	\$ 125,500	\$ 227,469
G. Tyler Runnels or Jasmine							
Niklas Runnels TTEES The							
Runnels Family Trust dtd	\$	0.81	\$ 0.288	226 922	\$ 264.727	\$ 94.125	¢ 170.600
1-11-2000				326,823	,	, .	\$ 170,602
High Tide, LLC	\$	0.81	\$ 0.288	326,823	\$ 264,727	\$ 94,125	\$ 170,602
JMG Triton Offshore Fund,	<b>.</b>	0.01	e 0.000	0.170.010	e 1.764.040	e (07.500	¢ 1 107 040
Ltd.	\$	0.81	\$ 0.288	2,178,819	\$ 1,764,843	\$ 627,500	\$ 1,137,343
JMG Capital Partners, LP	\$	0.81	\$ 0.288	2,178,819	\$ 1,764,843	\$ 627,500	\$ 1,137,343
Cranshire Capital, LP	\$	0.81	\$ 0.288	653,646	\$ 529,453	\$ 188,250	\$ 341,203
MM & B Holdings, a	ф	0.01	ф. 0. <b>2</b> 00	2 170 010	ф. 1.77.C4.0.42	ф. <b>сод 5</b> 00	Ф. 1.107.242
California general partnership	\$	0.81	\$ 0.288	2,178,819	\$ 1,764,843	\$ 627,500	\$ 1,137,343
JGB Capital, LP	\$	0.81	\$ 0.288	653,646	\$ 529,453	\$ 188,250	\$ 341,203
Bristol Investment Fund, Ltd.	\$	0.81	\$ 0.288	5,338,108	\$ 4,323,867	\$ 1,537,375	\$ 2,786,492
Overbrook Fund I, LLC	\$	0.81	\$ 0.288	435,764	\$ 352,969	\$ 125,500	\$ 227,469
Portside Growth and	ф	0.01	ф. 0. <b>2</b> 00	2 555 050	d 2 000 162	ф. <b>7.40.4</b> 50	ф. 1.245. <b>7</b> 05
Opportunity Fund	\$	0.81	\$ 0.288	2,577,979	\$ 2,088,163	\$ 742,458	\$ 1,345,705
Rockmore Investment Master	ф	0.01	ф. 0. <b>2</b> 00	(00.250	Ø 550 100	ф. 100 <b>7</b> 02	Φ. 260.211
Fund Ltd.	\$	0.81	\$ 0.288	690,250	\$ 559,103	\$ 198,792	\$ 360,311
Omicron Master Trust	\$	0.81	\$ 0.288	0	\$	\$	\$
Smithfield Fiduciary, LLC	\$	0.81	\$ 0.288	1,089,410	\$ 882,422	\$ 313,750	\$ 568,672
Alpha Capital	\$	0.81	\$ 0.288	1,089,410	\$ 882,422	\$ 313,750	\$ 568,672
Midsummer Investment, Ltd.	\$	0.81	\$ 0.288	1,743,056	\$ 1,411,875	\$ 502,000	\$ 909,875
Bushido Capital Master Fund,	ф	0.01	ф. 0. <b>2</b> 00	544.505	ф. 441. <b>2</b> 11	h 156.055	ф. 204.22 <i>ć</i>
LP	\$	0.81	\$ 0.288	544,705	\$ 441,211	\$ 156,875	\$ 284,336
John A. Kryzanowski	\$	0.81	\$ 0.288	871,528	\$ 705,938	\$ 251,000	\$ 454,938
DAFNA LifeScience, Ltd.	\$	0.81	\$ 0.288	544,705	\$ 441,211	\$ 156,875	\$ 284,336
Whalehaven Capital Fund	<u></u>	0.01	d 0.200	1 (24 117	Ф. 1.222.622	d 470 605	Ф. 052.000
Limited	\$	0.81	\$ 0.288	1,634,115	\$ 1,323,633	\$ 470,625	\$ 853,008
Stonestreet, LP	\$	0.81	\$ 0.288	0	\$ 1.764.942	\$ 627.500	\$
Anthem Ventures Fund, LP	\$	0.81	\$ 0.288	2,178,819	\$ 1,764,843	\$ 627,500	\$ 1,137,343
Evan S. Malik	\$	0.81	\$ 0.288	108,941	\$ 88,242	\$ 31,375	\$ 56,867
Gamma Opportunity Fund	<b>.</b>	0.01	e 0.200	272.252	e 220.605	e 70.427	¢ 140 160
Capital Partners LP Class A	\$	0.81	\$ 0.288	272,352	\$ 220,605	\$ 78,437	\$ 142,168
Gamma Opportunity Fund	_	0.01	d 0.200	050 050	d 220 (07	Ф. 70.107	d 142.170
Capital Partners LP Class C	\$	0.81	\$ 0.288	272,352	\$ 220,605	\$ 78,437	\$ 142,168
T.R. Winston &					Ф	Ф	Φ.
Company, LLC				20 120 242	\$	\$	\$
Total				38,129,340	\$ 30,884,765	\$ 10,981,250	\$ 19,903,515

<sup>\*</sup> This amount does not include Original Issue Discount.

# Total Potential Profit from Other Securities

The following tables show the total possible profit to be realized as a result of any conversion discounts for securities underlying any other warrants, options, notes or other securities of the Company in connection with the September 2005 financing and the September 2006 financing that are held by the selling security holders or any affiliates of the selling security holders.

# September 2005 Financing

		Exercise Pricé		Price o	ined Market of Shares	of Sha	rsion Price res		Possible	
	Common Stoc		Shares Underlying			Under	• 0	Discou		
Selling Security Holder	on Closing Da	teWarrants(1)	2005 Warrants	2005 V	Varrants	2005 V	Varrants	Mark	et Price(2)	
Newberg Family Trust UTD										
12/18/90	\$ 2.20	\$ 2.53	136,413	\$	300,109	\$	345,125	\$	(45,016	)
JMB Capital Partners, LP	\$ 2.20	\$ 2.53	409,239	\$	900,326	\$	1,035,375	\$	(135,049	)
Jay Goldman Master Limited										
Partnership	\$ 2.20	\$ 2.53	409,239	\$	900,326	\$	1,035,375	\$	(135,049	)
CAMOFI Master LDC	\$ 2.20	\$ 2.53	272,826	\$	600,217	\$	690,250	\$	(90,033	)
Shapiro Family Trust Dated										
September 25, 1989	\$ 2.20	\$ 2.53	54,565	\$	120,043	\$	138,050	\$	(18,007	)
G. Tyler Runnels or Jasmine Niklas Runnels TTEES The Runnels Family Trust dtd										
1-11-2000	\$ 2.20	\$ 2.53	40,924	\$	90,033	\$	103,538	\$	(13,505	)
High Tide, LLC	\$ 2.20	\$ 2.53	40,924	\$	90,033	\$	103,538	\$	(13,505	)
JMG Triton Offshore Fund, Ltd.	\$ 2.20	\$ 2.53	272,826	\$	600,217	\$	690,250	\$	(90,033	)
JMG Capital Partners, LP	\$ 2.20	\$ 2.53	272,826	\$	600,217	\$	690,250	\$	(90,033	)
Cranshire Capital, LP	\$ 2.20	\$ 2.53	81,848	\$	180,065	\$	207,075	\$	(27,010	)
MM & B Holdings, a California	ф. <b>2.2</b> 0	Φ 2.52	272.026	ф	600.217	ф	600.250	ф	(00.022	
general partnership	\$ 2.20	\$ 2.53	272,826	\$	600,217	\$	690,250	\$	(90,033	)
JGB Capital, LP	\$ 2.20	\$ 2.53	204,620	\$	450,163	\$	517,688	\$	(67,524	)
Bristol Investment Fund, Ltd.	\$ 2.20	\$ 2.53	545,652	\$	1,200,435	\$	1,380,500	\$	(180,065	)
Overbrook Fund I, LLC	\$ 2.20	\$ 2.53	54,565	\$	120,043	\$	138,050	\$	(18,007	)
Portside Growth and Opportunity		e 2.52	126 412	¢.	200 100	ď	245 125	¢	(45.016	`
Fund Rockmore Investment Master	\$ 2.20	\$ 2.53	136,413	\$	300,109	\$	345,125	\$	(45,016	)
Fund Ltd.	\$ 2.20	\$ 2.53								
Omicron Master Trust	\$ 2.20	\$ 2.53	272,826	\$	600,217	\$	690,250	\$	(90,033	\
Smithfield Fiduciary, LLC	\$ 2.20	\$ 2.53	136.413	\$	300,109	\$	345,125	\$	(45,016	)
Alpha Capital	\$ 2.20	\$ 2.53	136,413	\$	300,109	\$	345,125	\$	(45,016	)
Midsummer Investment, Ltd.	\$ 2.20	\$ 2.53	218,261	\$	480,174	\$	552,200	\$	(72,026	)
Bushido Capital Master Fund,	\$ 2.20	\$ 2.33	210,201	Ф	400,174	Ф	332,200	Φ	(72,020	,
LP	\$ 2.20	\$ 2.53	68,207	\$	150.054	\$	172,563	\$	(22,508	`
John A. Kryzanowski	\$ 2.20	\$ 2.53	109,130	\$	240,087	\$	276,100	\$	(36,013	)
DAFNA LifeScience, Ltd.	\$ 2.20	\$ 2.53	165,132	\$	363,289	\$	417,783	\$	(54,493	)
Whalehaven Capital Fund	Ψ 2.20	Ψ 2.33	105,152	Ψ	303,207	Ψ	717,703	Ψ	(34,473	)
Limited	\$ 2.20	\$ 2.53	495,395	\$	1,089,868	\$	1,253,349	\$	(163,480	)
Stonestreet, LP	\$ 2.20	\$ 2.53	165,132	\$	363,289	\$	417,783	\$	(54,493	)
Anthem Ventures Fund, LP	\$ 2.20	\$ 2.53	660,526	\$	1,453,158	\$	1,671,132	\$	(217,974	)
Evan S. Malik	\$ 2.20	\$ 2.53	33,026	\$	72,658	\$	83,557	\$	(10,899	í
Gamma Opportunity Fund	Ų 2.20	ų <b>2.</b> 00	-0,020	Ψ	. 2,000	Ψ	22,007	<b>—</b>	(-0,0)	,
Capital Partners LP Class A	\$ 2.20	\$ 2.53	82,566	\$	181,645	\$	208,891	\$	(27,247	)
Gamma Opportunity Fund	÷ 2.20	Ţ	,	Ψ	,	Ψ	,	<u> </u>	(=·,=·,	,
Capital Partners LP Class C	\$ 2.20	\$ 2.53	82,567	\$	181,647	\$	208,894	\$	(27,247	)
T.R. Winston & Company, LLC	\$2.20	\$2.53	1,162,239	\$	2,556,926	\$	2,940,465	\$	(383,539	)
Total		,	6,993,539	\$	15,385,785	\$	17,693,653	\$	(2,307,868	)
			, ,		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, ,,,,,,,		. , . , . , . , . , . , . , . , . , . ,	,

#### September 2006 Financing

	Market Price per Share of	Exercise Price	Total Possible	Combined Market Price of Shares	Combined Exercise Price of Shares	Total Possible
	Common Stoc		Shares Underlying	Underlying	Underlying	Discount to
Selling Security Holder	on Closing Da	teWarrants	2006 Warrants	2006 Warrants	2006 Warrants	Market Price
Newberg Family Trust UTD					A 150 (51	A 260 710
12/18/90	\$ 0.81	\$ 0.3168	544,705	\$ 441,211	\$ 172,671	\$ 268,540
JMB Capital Partners, LP	\$ 0.81	\$ 0.3168	1,634,114	\$ 1,323,632	\$ 518,014	\$ 805,618
Jay Goldman Master Limited	Φ 0.01	Φ 0.2160	1.624.114	Ф. 1.000.600	ф. <b>51</b> 0.014	d 007.610
Partnership	\$ 0.81	\$ 0.3168 \$ 0.3168	1,634,114	\$ 1,323,632	\$ 518,014	\$ 805,618
CAMOFI Master LDC	\$ 0.81	\$ 0.3168	1,089,409	\$ 882,421	\$ 345,343	\$ 537,079
Shapiro Family Trust Dated	¢ 0.01	¢ 0.2160	217 002	¢ 177 494	¢ (0.060	¢ 107.416
September 25, 1989	\$ 0.81	\$ 0.3168	217,882	\$ 176,484	\$ 69,069	\$ 107,416
G. Tyler Runnels or Jasmine Niklas Runnels TTEES The						
Runnels Family Trust dtd						
1-11-2000	\$ 0.81	\$ 0.3168	163.411	\$ 132.363	\$ 51.801	\$ 80.562
High Tide, LLC	\$ 0.81	\$ 0.3168	163,411	\$ 132,363	\$ 51,801	\$ 80,562
JMG Triton Offshore Fund, Ltd.	\$ 0.81	\$ 0.3168	1,089,410	\$ 882,422	\$ 345,343	\$ 537,079
JMG Capital Partners, LP	\$ 0.81	\$ 0.3168	1,089,410	\$ 882,422	\$ 345,343	\$ 537,079
Cranshire Capital, LP	\$ 0.81	\$ 0.3168	326,823	\$ 264,727	\$ 103,603	\$ 161,124
MM & B Holdings, a California	φ 0.61	\$ 0.5100	320,623	\$ 204,727	\$ 105,005	\$ 101,124
general partnership	\$ 0.81	\$ 0.3168	1,089,410	\$ 882,422	\$ 345,343	\$ 537,079
JGB Capital, LP	\$ 0.81	\$ 0.3168	326,823	\$ 264,727	\$ 103,603	\$ 161,124
Bristol Investment Fund, Ltd.	\$ 0.81	\$ 0.3168	2,669,054	\$ 2,161,934	\$ 846,090	\$ 1,315,844
Overbrook Fund I, LLC	\$ 0.81	\$ 0.3168	217,882	\$ 176,484	\$ 69,069	\$ 1,313,844
Portside Growth and Opportunity	φ 0.01	Ψ 0.5100	217,002	Ψ 170,τοτ	Ψ 02,002	Ψ 107, τ10
Fund	\$ 0.81	\$ 0.3168	1,288,990	\$ 1,044,082	\$ 408,610	\$ 635,472
Rockmore Investment Master	ψ 0.01	Ψ 0.5100	1,200,770	Ψ 1,044,002	φ 400,010	Ψ 033,472
Fund Ltd.	\$ 0.81	\$ 0.3168	345.125	\$ 279,551	\$ 109,405	\$ 170,147
Omicron Master Trust	\$ 0.81	\$ 0.3168	0	\$	\$	\$
Smithfield Fiduciary, LLC	\$ 0.81	\$ 0.3168	544.705	\$ 441,211	\$ 172,671	\$ 268,540
Alpha Capital	\$ 0.81	\$ 0.3168	544,705	\$ 441,211	\$ 172,671	\$ 268,540
Midsummer Investment, Ltd.	\$ 0.81	\$ 0.3168	871,527	\$ 705,937	\$ 276,274	\$ 429,663
Bushido Capital Master Fund, LP		\$ 0.3168	272,353	\$ 220,606	\$ 86,336	\$ 134,270
John A. Kryzanowski	\$ 0.81	\$ 0.3168	435,764	\$ 352,969	\$ 138,137	\$ 214,832
DAFNA LifeScience, Ltd.	\$ 0.81	\$ 0.3168	272,353	\$ 220,606	\$ 86,336	\$ 134,270
Whalehaven Capital Fund	,	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,,,,,,,	,,	, , , , , ,
Limited	\$ 0.81	\$ 0.3168	817,058	\$ 661,817	\$ 259,007	\$ 402,810
Stonestreet, LP	\$ 0.81	\$ 0.3168	0	\$	\$	\$
Anthem Ventures Fund, LP	\$ 0.81	\$ 0.3168	1,089,409	\$ 882,421	\$ 345,343	\$ 537,079
Evan S. Malik	\$ 0.81	\$ 0.3168	54,471	\$ 44,122	\$ 17,267	\$ 26,854
Gamma Opportunity Fund	-		,			
Capital Partners LP Class A	\$ 0.81	\$ 0.3168	136,176	\$ 110,303	\$ 43,168	\$ 67,135
Gamma Opportunity Fund					·	
Capital Partners LP Class C	\$ 0.81	\$ 0.3168	136,176	\$ 110,303	\$ 43,168	\$ 67,135
T.R. Winston & Company, LLC	\$ 0.81	\$ 0.3168	4,575,521	\$ 3,706,172	\$ 1,450,440	\$ 2,255,732
	Ψ 0.01					

<sup>(1)</sup> In connection with an amendment to the 2005 Debenture financing documents executed on January 11, 2007, the exercise price of the 2005 Warrants was reduced from \$2.53 to \$0.95. On January 11, 2007 the market price per share of our common stock was \$0.86.

<sup>(2)</sup> Given that the exercise price for each of the warrants identified in this table is in excess of the market price on the date of issuance, all of the warrants identified herein are "out-of-the-money" and therefore have a negative value ascribed to them.

# **Replacement Warrants**

Selling Security Holder			Total Possible Shares Underlying t Replacement Warrants	Combined Market Price of Shares Underlying Replacement Warrants	Combined Exercise Price of Shares Underlying Replacement Warrants	Total Possible Discount to Market Price(2)
Newberg Family Trust UTD						
12/18/90	\$ 0.81	\$ 1.60	136,413	\$ 110,495	\$ 218,261	\$ (107,766 )
JMB Capital Partners, LP	\$ 0.81	\$ 1.60	409,239	\$ 331,484	\$ 654,782	\$ (323,299 )
Jay Goldman Master Limited						
Partnership	\$ 0.81	\$ 1.60	409,239	\$ 331,484	\$ 654,782	\$ (323,299 )
CAMOFI Master LDC	\$ 0.81	\$ 1.60	272,826	\$ 220,989	\$ 436,522	\$ (215,533 )
Shapiro Family Trust Dated						
September 25, 1989	\$ 0.81	\$ 1.60	54,565	\$ 44,198	\$ 87,304	\$ (43,106 )
G. Tyler Runnels or Jasmine Niklas Runnels TTEES The Runnels						
Family Trust dtd 1-11-2000	\$ 0.81	\$ 1.60	40,924	\$ 33,148	\$ 65,478	\$ (32,330 )
High Tide, LLC	\$ 0.81	\$ 1.60	40,924	\$ 33,148	\$ 65,478	\$ (32,330 )
JMG Triton Offshore Fund, Ltd.	\$ 0.81	\$ 1.60	272,826	\$ 220,989	\$ 436,522	\$ (215,533 )
JMG Capital Partners, LP	\$ 0.81	\$ 1.60	272,826	\$ 220,989	\$ 436,522	\$ (215,533 )
Cranshire Capital, LP	\$ 0.81	\$ 1.60	81,848	\$ 66,297	\$ 130,957	\$ (64,660 )
MM & B Holdings, a California						
general partnership	\$ 0.81	\$ 1.60	272,826	\$ 220,989	\$ 436,522	\$ (215,533 )
JGB Capital, LP	\$ 0.81	\$ 1.60	204,620	\$ 165,742	\$ 327,392	\$ (161,650 )
Bristol Investment Fund, Ltd.	\$ 0.81	\$ 1.60	545,652	\$ 441,978	\$ 873,043	\$ (431,065 )
Overbrook Fund I, LLC	\$ 0.81	\$ 1.60	54,565	\$ 44,198	\$ 87,304	\$ (43,106 )
Portside Growth and Opportunity						
Fund	\$ 0.81	\$ 1.60	136,413	\$ 110,495	\$ 218,261	\$ (107,766 )
Rockmore Investment Master Fund						
Ltd.	\$ 0.81	\$ 1.60	86,422	\$ 70,002	\$ 138,275	\$ (68,273 )
Omicron Master Trust	\$ 0.81	\$ 1.60	0	\$	\$	\$
Smithfield Fiduciary, LLC	\$ 0.81	\$ 1.60	136,413	\$ 110,495	\$ 218,261	\$ (107,766 )
Alpha Capital	\$ 0.81	\$ 1.60	136,413	\$ 110,495	\$ 218,261	\$ (107,766 )
Midsummer Investment, Ltd.	\$ 0.81	\$ 1.60	218,261	\$ 176,791	\$ 349,218	\$ (172,426 )
Bushido Capital Master Fund,						
LP	\$ 0.81	\$ 1.60	68,207	\$ 55,248	\$ 109,131	\$ (53,884 )
John A. Kryzanowski	\$ 0.81	\$ 1.60	109,130	\$ 88,395	\$ 174,608	\$ (86,213 )
DAFNA LifeScience, Ltd.	\$ 0.81	\$ 1.60	0	\$	\$	\$
Whalehaven Capital Fund						
Limited	\$ 0.81	\$ 1.60	0	\$	\$	\$
Stonestreet, LP	\$ 0.81	\$ 1.60	0	\$	\$	\$
Anthem Ventures Fund, LP	\$ 0.81	\$ 1.60	0	\$	\$	\$
Evan S. Malik	\$ 0.81	\$ 1.60	0	\$	\$	\$
Gamma Opportunity Fund Capital						
Partners LP Class A	\$ 0.81	\$ 1.60	0	\$	\$	\$
Gamma Opportunity Fund Capital						
Partners LP Class C	\$ 0.81	\$ 1.60	0	\$	\$	\$
T.R. Winston & Company, LLC	\$ 0.81	\$ 1.60	581,120	\$ 470,706	\$ 929,790	\$ (459,084 )
Total			4,541,672	\$ 3,678,753	\$ 7,266,673	\$ (3,587,920 )
			-	-		

<sup>(1)</sup> The exercise price of these replacement warrants was subsequently adjusted from \$1.60 to \$0.95 pursuant to the anti-dilution provisions thereof.

<sup>(2)</sup> Given that the exercise price for each of the warrants identified in this table is in excess of the market price on the date of issuance, all of the warrants identified herein are "out-of-the-money" and therefore have a negative value ascribed to them.

Comparison of Company Proceeds from September 2005 Financing and September 2006 Financing to Potential Investor Profit

#### September 2005 Financing

Gross Proceeds from September 2005 Financing:	\$	17,750,000
Less Payments Made or Required to be Made to Selling Security Holders and Any of		
Their Affiliates:	\$	2,464,000
Resulting Net Proceeds from September 2005 Financing:	\$	15,286,000
Combined Total Possible Discount to Market Price:		
Debentures	\$	
Warrants*	\$	
Total	\$	
(Payments Made or Required to be Made to Selling Security Holders + Combined		
Total Possible Discount to Market Price)/ Net Proceeds from September 2005		
Financing:	16.1	%
Percentage Averaged over Term of 2005 Debentures (3 years):	5.4	%

<sup>\*</sup> Given that the exercise price for each of the warrants identified in this table is in excess of the market price on the date of issuance, all of the warrants identified herein are "out-of-the-money" and therefore have no value ascribed to them for purposes of this table.

#### September 2006 Financing

Gross Proceeds from September 2006 Financing:	\$	8,250,000	
Less Payments Made or Required to be Made to Selling Security Holders and Any			
of Their Affiliates:	\$	4,383,875	
Resulting Net Proceeds from September 2006 Financing:	\$	3,866,125	
Combined Total Possible Discount to Market Price:			
Debentures	\$	19,903,515	
Warrants	\$	11,654,619	
Total	\$	31,558,134	
(Payments Made or Required to be Made to Selling Security Holders + Combined			
Total Possible Discount to Market Price)/ Net Proceeds from September 2006			
Financing:	929.7		%*
Percentage Averaged over Term of 2006 Debentures (3 years):	309.9		%*

<sup>\*</sup> The payments made line item includes the value ascribed to the portion of the warrant issued to T.R. Winston & Company, LLC as consideration for services provided to the Company in connection with the warrant repricing. The gross proceeds line item and resulting net proceeds line item do not, however, include \$4,314,589 in proceeds received by the Company as a result of the exercise of certain of the 2005 Warrants in connection with the warrant repricing.

Prior Securities Transactions between the Company and Selling Security Holders

On January 31, 2005, the small business issuer entered into a merger pursuant to which it effected a complete change of business. Upon the completion of the merger, the issuer ceased all of its pre-merger operations and adopted the business of the Company as it exists today. Prior to the merger, the issuer had

minimal business, operations, revenues and assets, and had been involved in an industry entirely unrelated to the business of the Company as it exists today. As a result, the following table sets forth all prior securities transactions between us and the selling security holders, any affiliates of such selling security holders or any person with whom any selling security holder has a contractual relationship regarding such securities transactions, since January 31, 2005, the date of the merger.

		Number of Shares of	Number of Shares of Common Stock Outstanding Prior to Transaction Held by Persons Other than Selling Security Holders,		Percentage of Total Issued and Outstanding Securities Held by Persons Other than Selling Security Holders, Affiliates of the Company, or	Market Price	
Selling Security Holder or Affiliate of	Date of	Common Stock Outstanding Prior to	Affiliates of the Company, or Affiliates of Selling	of Common Stock	Affiliates of Selling Security Holders Issued or Issuable	gper Share of Common Stock	Current Market Price per
Selling Security Holder	Transaction	Transaction	Security Holders	in Transaction	in Transaction	Transaction	Share*
Alan C. Shapiro	8/1/2005(1)	23,166,466	20,164,574	50,000	0.25%	\$ 2.48	\$ 0.80
_	10/5/2005(2)	23,099,879	17,046,288	2,813	0.02%	\$ 2.25	\$ 0.80
	4/20/2006(1)	24,876,655	18,607,356	50,000	0.27%	\$ 1.35	\$ 0.80
	7/3/2006(2)	25,872,015	19,787,124	44,216	0.22%	\$ 0.65	\$ 0.80
	1/5/2007(2)	39,759,973	36,216,730	40,034	0.11%	\$ 0.74	\$ 0.80

<sup>\*</sup> Market price per share of common stock on March 27, 2007.

<sup>(1)</sup> We issued these stock options to Dr. Shapiro as compensation for duties performed by him as a member of our Board of Directors.

<sup>(2)</sup> We issued these shares of our common stock to Dr. Shapiro as compensation for duties performed by him as a member of our Board of Directors.

Comparison of Registered Shares to Outstanding Shares

# **September 2005 Financing**

Selling Security Holder	Number of Shares of Common Stock Outstanding Prior to September 2005 Financing Held by Persons Other than Selling Security Holders, Affiliates of the Company, or Affiliates of Selling Security Holders*	Number of Shares of Common Stock Registered for Resale by Selling Security Holders or Affiliates of Selling Security Holders in Prior Registration Statements	Number of Shares of Common Stock Registered for Resale by Selling Security Holders or Affiliates of Selling Security Holders Still Held by the Same(1)	Number of Shares of Common Stock Sold in Registered Resale Transactions by Selling Security Holders or Affiliates of Selling Security Holders	Number of Shares of Common Stock Registered for Resale on behalf of Selling Security Holders or Affiliates of Selling Security Holders in September 2005 Financing
Newberg Family Trust UTD	20.250.554		20.004	402.025	<b>722</b> 044
12/18/90	20,359,574	0	29,881	493,035	532,011
JMB Capital Partners, LP	20,359,574	0	0	1,596,033	1,596,033
Jay Goldman Master Limited	20 250 574	0	00.642	054.100	1.506.022
Partnership	20,359,574	0	89,643	854,192	1,596,033
CAMOFI Master LDC	20,359,574	U	135,425	928,777	1,064,022
Shapiro Family Trust Dated	20 250 574	0	205,283	0	212 902
September 25, 1989 G. Tyler Runnels or Jasmine Niklas	20,359,574	U	203,283	U	212,803
Runnels TTEES The Runnels Family					
Trust dtd 1-11-2000	20,359,574	0	0	126,059	159,603
High Tide, LLC	20,359,574	0	0	126,059	159,603
JMG Triton Offshore Fund, Ltd.	20,359,574	0	5,081	1,058,941	1,064,022
JMG Capital Partners, LP	20,359,574	0	62.043	1,001,979	1,064,022
Cranshire Capital, LP	20,359,574	0	02,043	319,207	319,207
MM & B Holdings, a California	20,337,374	· ·	· ·	317,207	317,207
general partnership	20.359.574	0	0	1.064.022	1.064.022
JGB Capital, LP	20,359,574	0	0	312,363	798,016
Bristol Investment Fund, Ltd.	20,359,574	0	0	2,059,589	2,128,043
Overbrook Fund I, LLC	20,359,574	0	0	78,961	212,804
Portside Growth and Opportunity	.,,.			,	7
Fund	20,359,574	0	0	919,188	1,052,874
Rockmore Investment Master Fund	, ,			•	, ,
Ltd.	20,359,574	0	0	327,904	327,904
Omicron Master Trust	20,359,574	0	0	28,851	215,255
Smithfield Fiduciary, LLC	20,359,574	0	0	395,236	532,011
Alpha Capital	20,359,574	0	0	371,990	532,011
Midsummer Investment, Ltd.	20,359,574	0	35,035	300,129	851,217
Bushido Capital Master Fund, LP	20,359,574	0	48,440	75,420	266,005
John A. Kryzanowski	20,359,574	0	375,502	35,066	425,609
DAFNA LifeScience, Ltd.	20,359,574	0	0	265,976	266,005
Whalehaven Capital Fund Limited	20,359,574	0	0	245,261	798,016
Stonestreet, LP	20,359,574	0	0	22,153	266,005
Anthem Ventures Fund, LP	20,359,574	0	240,920	77,833	1,064,022
Evan S. Malik	20,359,574	0	34,556	0	53,201
Gamma Opportunity Fund Capital Partners LP Class A	20,359,574	0	0	18,881	133,003
Gamma Opportunity Fund Capital					
Partners LP Class C	20,359,574	0	0	18,881	133,003
T.R. Winston & Company, LLC	20,359,574	0	0	0	1,510,911

<sup>(1)</sup> This amount does not include shares of common stock underlying any outstanding convertible securities, options, or warrants.

# **September 2006 Financing**

	Number of Shares of Common Stock Outstanding Prior to September 2006 Financing Held by Persons Other than Selling Security Holders, Affiliates of the Company, or Affiliates of Selling	Number of Shares of Common Stock Registered for Resale by Selling Security Holders or Affiliates of Selling Security Holders in Prior Registration	Number of Shares of Common Stock Registered for Resale by Selling Security Holders or Affiliates of Selling Security Holders Still Held by	Number of Shares of Common Stock Sold in Registered Resale Transactions by Selling Security Holders or Affiliates of Selling Security	Number of Shares of Common Stock Registered for Resale on behalf of Selling Security Holders or Affiliates of Selling Security Holders in September 2006
Selling Security Holder	Security Holders*	Statements	the Same(1)	Holders	Financing
Newberg Family Trust UTD					
12/18/90	24,864,043	532,011	0	0	396,115
JMB Capital Partners, LP	24,864,043	1,596,033	0	0	959,086
Jay Goldman Master Limited					
Partnership	24,864,043	1,596,033	0	0	1,188,345
CAMOFI Master LDC	24,864,043	1,064,022	0	0	772,333
Shapiro Family Trust Dated	21061012	212.001	•	^	150 116
September 25, 1989	24,864,043	212,804	0	0	158,446
G. Tyler Runnels or Jasmine					
Niklas Runnels TTEES The					
Runnels Family Trust dtd 1-11-2000	24,864,043	159,603	0	0	95,113
High Tide, LLC	24,864,043	159,603	0	0	95,113
JMG Triton Offshore Fund, Ltd.	24,864,043	1,064,022	0	0	682,800
JMG Capital Partners, LP	24,864,043	1,064,022	0	0	712,644
Cranshire Capital, LP	24,864,043	319,207	0	0	237,669
MM & B Holdings, a California	21,001,013	319,207	· ·	v	237,009
general partnership	24,864,043	1,064,022	0	0	657,816
JGB Capital, LP	24,864,043	798,016	0	0	310,921
Bristol Investment Fund, Ltd.	24,864,043	2,128,043	0	0	1,588,646
Overbrook Fund I, LLC	24,864,043	212,804	0	0	158,446
Portside Growth and Opportunity					
Fund	24,864,043	1,052,874	0	0	811,201
Rockmore Investment Master Fund					
Ltd.	24,864,043	327,904	0	0	253,607
Omicron Master Trust	24,864,043	215,255	0	0	25,054
Smithfield Fiduciary, LLC	24,864,043	532,011	0	0	396,115
Alpha Capital	24,864,043	532,011	0	0	317,044
Midsummer Investment, Ltd.	24,864,043	851,217	0	0	633,784
Bushido Capital Master Fund, LP	24,864,043	266,005	0	0	198,058
John A. Kryzanowski	24,864,043	425,609	0	0	316,892
DAFNA LifeScience, Ltd.	24,864,043	266,005	0	0	100,521
Whalehaven Capital Fund Limited	24,864,043	798,016	0	0	589,159
Stonestreet, LP	24,864,043	266,005	0	0	51,749
Anthem Ventures Fund, LP	24,864,043	1,064,022	0	0	792,230
Evan S. Malik Gommo Opportunity Fund Conital	24,864,043	53,201	U	U	39,612
Gamma Opportunity Fund Capital Partners LP Class A	24,864,043	133,003	0	0	79,261
Gamma Opportunity Fund Capital Partners LP Class C	24,864,043	133,004	0	0	79,261
T.R. Winston & Company, LLC	24,864,043	1,510,911	0	0	819,326

<sup>(1)</sup> This amount does not include shares of common stock underlying any outstanding convertible securities, options, or warrants.

Company's Intention and Ability to Satisfy its Obligations to Selling Security Holders

We have the intention, and a reasonable basis to believe that we will have the financial ability, to make payments on the overlying securities in both cash and shares of our common stock. We have duly accounted for such payments as part of our strategic plan.

Existing Short Positions by Selling Security Holders

Based upon information provided by the selling security holders, the following selling security holders have existing short positions in our common stock:

Selling Security Holder	Existing Short	t Position (Y/N)
Newberg Family Trust UTD 12/18/90	N	
JMB Capital Partners, LP	N	
Jay Goldman Master Limited Partnership	N	
CAMOFI Master LDC	N	
Shapiro Family Trust Dated September 25, 1989	N	
G. Tyler Runnels or Jasmine Niklas Runnels TTEES The Runnels		
Family Trust dtd 1-11-2000	N	
High Tide, LLC	N	
JMG Triton Offshore Fund, Ltd.	Y	(1)
JMG Capital Partners, LP	Y	(1)
Cranshire Capital, LP		(2)
MM & B Holdings, a California general partnership	N	
JGB Capital, LP	Y	(3)
Bristol Investment Fund, Ltd.		(4)
Overbrook Fund I, LLC	N	
Portside Growth and Opportunity Fund		(5)
Rockmore Investment Master Fund Ltd.		(6)
Omicron Master Trust	N	
Smithfield Fiduciary, LLC		(7)
Alpha Capital	Y	(1)
Midsummer Investment, Ltd.		(8)
Bushido Capital Master Fund, LP	N	
John A. Kryzanowski	N	
DAFNA LifeScience, Ltd.	N	
Whalehaven Capital Fund Limited	N	
Stonestreet, LP	N	
Anthem Ventures Fund, LP	N	
Evan S. Malik	N	
Gamma Opportunity Fund Capital Partners LP Class A	N	
Gamma Opportunity Fund Capital Partners LP Class C	N	
T.R. Winston & Company, LLC	N	

- Entered into short position on January 10, 2007, after the announcements of both the September 2005 Financing and the September 2006 Financing; after the filing of Registration Statement No. 333-129019 on Form SB-2, which was filed on October 14, 2005, originally declared effective on October 28, 2005, and subsequently amended; after the filing of Registration Statement No. 333-137601 on Form SB-2, which was filed on September 26, 2006 and subsequently withdrawn; and prior to the filing of Registration Statement No. 333-140265 on Form SB-2, which was filed on January 26, 2007.
- (2) In response to our request for information regarding whether this selling security holder has an existing short position in our common stock, we received the following response from Cranshire Capital, LP: We acknowledge the Staff's stated position that short sales of common stock made prior to the effectiveness of the Registration Statement may not be covered with the shares (or underlying shares) acquired in the PIPE transaction.
- Entered into short positions on March 13, 2006, March 14, 2006, April 5, 2006, May 22, 2006, May 23, 2006, August 24, 2006, August 31, 2006, September 5, 2006, September 8, 2006, September 12, 2006, September 13, 2006, September 19, 2006, September 28, 2006, October 12, 2006, October 24, 2006, October 26, 2006, October 27, 2006, November 14, 2006, November 15, 2006, December 1, 2006, January 16, 2007, January 19, 2007. The September 2005 financing was announced on September 16, 2005. The September 2006 financing was announced on August 25, 2006. Registration Statement No. 333-129019 on Form SB-2 was filed on October 14, 2005, originally declared effective on October 28, 2005, and subsequently amended. Registration Statement No. 333-137601 on Form SB-2 was filed on September 26, 2006 and subsequently withdrawn. Registration Statement No. 333-140265 on Form SB-2 was filed on January 26, 2007.
- (4) In response to our request for information regarding whether this selling security holder has an existing short position in our common stock, we received the following response from Bristol Investment Fund, Ltd.: In the ordinary course of its business in trading securities positions, Bristol Investment Fund, Ltd. (Bristol) may from time to time enter into short sales. However, no short sales are entered into while in possession of any material, nonpublic information. Bristol is aware of and acknowledges the position of the Staff of the Commission set forth in Item A.65 of the SEC Telephone Interpretations Manual.
- (5) In response to our request for information regarding whether this selling security holder has an existing short position in our common stock, we received the following response from Portside Growth and Opportunity Fund: In the ordinary course of its business in trading securities positions, the Selling Stockholder may enter into short sales. However, no such short sales are entered into prior to the public announcement of any private placement pursuant to which the applicable securities were acquired by the Selling Stockholder and the Selling Stockholder is aware of and adheres to the position of the Staff of the Commission set forth in Item A.65 of the SEC Telephone Interpretations Manual.
- (6) In response to our request for information regarding whether this selling security holder has an existing short position in our common stock, we received the following response from Rockmore Investment Master Trust Ltd.: In the ordinary course of its business in trading securities positions, the undersigned may enter into short sales. However, no such short sales are entered into while in possession of any material, nonpublic information. The undersigned also acknowledges the position of the Staff of the Commission set forth in Item A.65 of the SEC Telephone Interpretations Manual.
- In response to our request for information regarding whether this selling security holder has an existing short position in our common stock, we received the following response from Smithfield Fiduciary, LLC: In the ordinary course of its business in trading securities positions, the undersigned may enter into short sales. However, no such short sales are entered into while in possession of any material, nonpublic information. The undersigned also acknowledges the position of the Staff of the Commission set forth in Item A.65 of the SEC Telephone Interpretations Manual.

(8) In response to our request for information regarding whether this selling security holder has an existing short position in our common stock, we received the following response from Midsummer Investment, Ltd.: In the ordinary course of its business in trading securities positions, the undersigned may enter into short sales. However, no such short sales are entered into while in possession of any material, nonpublic information. The undersigned also acknowledges the position of the Staff of the Commission set forth in Item A.65 of the SEC Telephone Interpretations Manual.

Relationships Between the Company and Selling Security Holders

We hereby confirm that a description of the relationships and arrangements between and among those parties is presented in the prospectus and that all agreements between and/or among those parties are included as exhibits to the registration statement by incorporation by reference. This disclosure pertains to all such relationships and arrangements occurring on and after January 31, 2005, the date on which the issuer entered into a merger and effected a complete change of business as further described above.

Method of Determining the Number of Shares Registered in this Prospectus

Pursuant to the registration rights agreement between us and the selling security holders, the number of shares of common stock that we are required to register is limited to an amount not in excess of the limits imposed by the Securities and Exchange Commission s application of Rule 415 to secondary, resale registration statements, provided that we register not less than 30% of our issued and outstanding common stock (less shares held by our affiliates) every six months until the registration requirements of the applicable registration rights agreement are satisfied in their entirety, and provided further that we continue to exercise best efforts to satisfy the registration requirements of the original registration rights agreement as promptly as possible.

Information Regarding Institutional Selling Security Holders

With respect to the shares to be offered for resale by each selling security holder that is a legal entity, the natural person or persons who exercise the sole or shared voting and/or dispositive powers with respect to the shares to be offered by that security holder are as follows:

Selling Security Holder	Control Person(1)
Newberg Family Trust UTD 12/18/90	Bruce Newberg
JMB Capital Partners, LP	Cyrus Hadidi
Jay Goldman Master Limited Partnership	Jay G. Goldman
CAMOFI Master LDC	Richard Smithline
Shapiro Family Trust Dated September 25, 1989	Alan C. Shapiro
G. Tyler Runnels or Jasmine Niklas Runnels TTEES The Runnels Family	G. Tyler Runnels, Trustee of the Runnels Family
Trust dtd 1-11-2000	Trust
High Tide, LLC	G. Tyler Runnels, Manager of High Tide, LLC
JMG Triton Offshore Fund, Ltd.	(1)
JMG Capital Partners, LP	(2)
Cranshire Capital, LP	(3)
MM & B Holdings, a California general partnership	Bryan Ezralow
JGB Capital, LP	Brett Cohen
Bristol Investment Fund, Ltd.	(4)
Overbrook Fund I, LLC	Arthur G. Altschul, Jr.
Portside Growth and Opportunity Fund	(5)
Rockmore Investment Master Fund Ltd.	(6)
Omicron Master Trust	(7)
Smithfield Fiduciary, LLC	(8)
Alpha Capital	Konrad Ackerman
Midsummer Investment, Ltd.	(9)
Bushido Capital Master Fund, LP	Ronald S. Dagar
DAFNA LifeScience, Ltd.	Nathan Fischel
Whalehaven Capital Fund Limited	Michael Finkelstein, CEO
Stonestreet, LP	Michael Finkelstein, Elizabeth Leonard
Anthem Ventures Fund, LP	William R. Woodward
Gamma Opportunity Fund Capital Partners LP Class A	Jonathan P. Knight
Gamma Opportunity Fund Capital Partners LP Class C	Jonathan P. Knight
T.R. Winston & Company, LLC	G. Tyler Runnels, Chairman & CEO

JMG Triton Offshore Fund, Ltd. (the Fund ) is an international business company organized under the laws of the British Virgin Islands. The Fund s investment manager is Pacific Assets Management LLC, a Delaware limited liability company (the Manager ) that has voting and dispositive power over the Fund s investments, including the Registrable Securities. The equity interests of the Manager are owned by Pacific Capital Management, Inc., a California corporation ( Pacific ) and Asset Alliance Holding Corp., a Delaware corporation. The equity interests of Pacific are owned by Messrs. Roger Richter, Jonathan M. Glaser and Daniel A. David. Messrs. Glaser and Richter have sole investment discretion over the Fund s portfolio holdings.

<sup>(2)</sup> JMG Capital Partners, L.P. ( JMG Partners ) is a California limited partnership. Its general partner is JMG Capital Management, LLC (the Manager ), a Delaware limited liability company and an investment adviser that has voting and dispositive power over JMG Partners investments, including the Registrable Securities. The equity interests of the Manager are owned by JMG Capital

Management, Inc. ( JMG Capital ), a California corporation, and Asset Alliance Holding Corp., a Delaware corporation. Jonathan M. Glaser is the Executive Officer and Director of JMG Capital and has sole investment discretion over JMG Partners portfolio holdings.

- (3) Mitchell P. Kofin, President of Downsview Capital, Inc., the General Partner of Cranshire Capital, L.P., has sole voting and investment control over the stock.
- (4) Bristol Capital Advisors, LLC (BCA) is the investment advisor to Bristol Investment Fund, Ltd. (Bristol). Paul Kessler is manager of BCA and as such has voting and investment control over the securities held by Bristol. Mr. Kessler disclaims beneficial ownership of these securities.
- Ramius Capital Group, LLC (Ramius Capital) is the investment adviser of Portside Growth and Opportunity Fund (Portside) and consequently has voting control and investment discretion over securities held by Portside. Ramius Capital disclaims beneficial ownership of the shares held by Portside. Peter A. Cohen, Morgan B. Stark, Thomas W. Strauss and Jeffrey M. Solomon are the sole managing members of C4S & Co., L.L.C., the sole managing member of Ramius Capital. As a result, Messrs. Cohen, Stark, Strauss and Solomon may be considered beneficial owners of any shares deemed to be beneficially owned by Ramius Capital. Messrs. Cohen, Stark, Strauss and Solomon disclaim beneficial ownership of these shares.
- Rockmore Capital, LLC ( Rockmore Capital ) and Rockmore Partners, LLC ( Rockmore Partners ), each a limited (6) liability company formed under the laws of the State of Delaware, serve as the investment manager and general partner, respectively, to Rockmore Investments (US) LP, a Delaware limited partnership, which invests all of its assets through Rockmore Investment Master Fund Ltd., an exempted company formed under the laws of Bermuda ( Rockmore Master Fund ). By reason of such relationships, Rockmore Capital and Rockmore Partners may be deemed to share dispositive power over the shares of our common stock owned by Rockmore Master Fund. Rockmore Capital and Rockmore Partners disclaim beneficial ownership of such shares of our common stock. Rockmore Partners has delegated authority to Rockmore Capital regarding the portfolio management decisions with respect to the shares of common stock owned by Rockmore Master Fund and, as of March 1, 2007, Mr. Bruce T. Bernstein and Mr. Brian Daly, as officers of Rockmore Capital, are responsible for the portfolio management decisions of the shares of common stock owned by Rockmore Master Fund. By reason of such authority, Messrs. Bernstein and Daly may be deemed to share dispositive power over the shares of our common stock owned by Rockmore Master Fund. Messrs. Bernstein and Daly disclaim beneficial ownership of such shares of our common stock and neither of such persons has any legal right to maintain such authority. No other person has sole or shared voting or dispositive power with respect to the shares of our common stock as those terms are used for purposes under Regulation 13D-G of the Securities Exchange Act of 1934, as amended. No person or group (as that term is used in Section 13(d) of the Securities Exchange Act of 1934, as amended, or the SEC s Regulation 13D-G) controls Rockmore Master Fund.
- Omicron Capital, L.P., a Delaware limited partnership (Omicron Capital), serves as investment manager to Omicron Master Trust, a trust formed under the laws of Bermuda (Omicron), Omicron Capital, Inc., a Delaware corporation (OCI), serves as general partner of Omicron Capital, and Winchester Global Trust Company Limited (Winchester) serves as the trustee of Omicron. By reason of such relationships, Omicron Capital and OCI may be deemed to share dispositive power over the shares of our common stock owned by Omicron, and Winchester may be deemed to share voting and dispositive power over the shares of our common stock owned by Omicron. Omicron Capital, OCI and Winchester disclaim beneficial ownership of such shares of our common stock. As of the date of this prospectus, Mr. Olivier H. Morali, an officer of OCI, and Mr. Bruce T. Bernstein, a consultant to OCI, have delegated authority from the board of directors of OCI regarding the portfolio management decisions with respect to the shares of our common stock owned by Omicron.

By reason of such delegated authority, Messrs. Morali and Bernstein may be deemed to share dispositive power over the shares of our common stock owned by Omicron. Messrs. Morali and Bernstein disclaim beneficial ownership of such shares of our common stock and neither of such persons has any legal right to maintain such delegated authority. No other person has sole or shared voting or dispositive power with respect to the shares of our common stock being offered by Omicron, as those terms are used for purposes under Regulation 13D-G of the Securities Exchange Act of 1934, as amended. Omicron and Winchester are not affiliates of one another, as that term is used for purposes of the Exchange Act or of any other person named in this prospectus as a selling stockholder. No person or group (as that term is used in Section 13(d) of the Exchange Act or the SEC s Regulation 13D-G) controls Omicron and Winchester.

- (8) Highbridge Capital Management, LLC is the trading manager of Smithfield Fiduciary LLC and has voting control and investment discretion over the securities held by Smithfield Fiduciary LLC. Glenn Dubin and Henry Swieca control Highbridge Capital Management, LLC and have voting control and investment discretion over the securities held by Smithfield Fiduciary LLC. Each of Highbridge Capital Management, LLC, Glenn Dubin and Henry Swieca disclaims beneficial ownership of the securities held by Smithfield Fiduciary LLC.
- (9) Midsummer Capital, LLC is the investment manager to Midsummer Investment Ltd. By virtue of such relationship, Midsummer Capital, LLC may be deemed to have dispositive power over the shares owned by Midsummer Investment Ltd. Midsummer Capital, LLC disclaims beneficial ownership of such shares. Mr. Michel Amsalem and Mr. Scott Kaufman have delegated authority from the members of Midsummer Capital, LLC with respect to the shares of common stock owned by Midsummer Investment Ltd. Messrs. Amsalem and Kaufman may be deemed to share dispositive power over the shares of our common stock owned by Midsummer Investment Ltd. Messrs. Amsalem and Kaufman disclaim beneficial ownership of such shares of our common stock and neither person has any legal right to maintain such delegated authority.

#### PLAN OF DISTRIBUTION

Each selling security holder and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. A selling security holder may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers,
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction,
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account,
- an exchange distribution in accordance with the rules of the applicable exchange,
- privately negotiated transactions,
- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part,
- broker-dealers may agree with the selling security holders to sell a specified number of such shares at a stipulated price per share,
- a combination of any such methods of sale,
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise, or
- any other method permitted pursuant to applicable law.

The selling security holders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling security holders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling security holders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with NASDR Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with NASDR IM-2440.

In connection with the sale of the common stock or interests therein, the selling security holders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling security holders may also sell shares of the common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling security holders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling security holders and any broker-dealers or agents that are involved in selling the shares may be deemed to be underwriters within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling security holder has informed us that it does not have any written or oral

agreement or understanding, directly or indirectly, with any person to distribute the common stock. In no event shall any broker-dealer receive fees, commissions and markups which, in the aggregate, would exceed eight percent (8%).

We are required to pay certain fees and expenses incurred by us incident to the registration of the shares. We have agreed to indemnify the selling security holders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because selling security holders may be deemed to be underwriters within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. Each selling security holder has advised us that it has not entered into any written or oral agreements, understandings or arrangements with any underwriter or broker-dealer regarding the sale of the resale shares. There is no underwriter or coordinating broker acting in connection with the proposed sale of the resale shares by the selling security holders.

We have agreed to keep this prospectus effective until the earlier of:

- the date on which the shares may be resold by the selling security holders without registration and without regard to any volume limitations by reason of Rule 144(e) under the Securities Act or any other rule of similar effect or
- the date on which all of the shares have been sold pursuant to the prospectus or Rule 144 under the Securities Act or any other rule of similar effect.

The resale shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling security holders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of the common stock by the selling security holders or any other person. We will make copies of this prospectus available to the selling security holders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale.

## LEGAL PROCEEDINGS

#### Geron-related Proceedings

University of Massachusetts, referred to as UMass, filed a complaint on February 22, 2004 in the Superior Court (Suffolk County) for the Commonwealth of Massachusetts. A decision adverse to UMass in this litigation could have had a materially adverse effect on our business. The complaint alleged the misappropriation by the defendants of valuable inventions in the fields of animal cloning and cell reprogramming, made by the defendants at UMass and with UMass support, that are exclusively licensed to ACT by UMass. The complaint included counts for declaratory judgment, breach of contract seeking specific performance, injunctive relief and damages, intentional interference with contract and prospective contractual relations, conversion, breach of duty, and breach of the covenant of good faith and fair dealing. ACT successfully intervened in the litigation to protect its interests. In May 2006 the parties to the litigation reached a settlement agreement, and this case was dismissed during the second quarter.

University of Massachusetts and Advanced Cell Technology, Inc. v. Roslin Institute (Edinburgh), Geron Corporation and Exeter Life Sciences, Inc., U.S. District Court for the District of Columbia. We filed an action on February 18, 2005 in the U.S. District Court for the District of Columbia. We brought this action under 35 U.S.C. 146 to reverse the decision of the Board of Patent Appeals and Interferences regarding a patent to a method of cloning non-human animals. The patent, U.S. Patent No. 5,945,577, is licensed by the University of Massachusetts exclusively to us.

University of Massachusetts and Advanced Cell Technology, Inc. v. Roslin Institute (Edinburgh), Geron Corporation and Exeter Life Sciences, Inc., U.S. District Court for the District of Columbia. We filed an action on April 7, 2005 in the U.S. District Court for the District of Columbia. We brought this action under 35 U.S.C. 146 to reverse the decision of the Board of Patent Appeals and Interferences regarding a patent to a method of creating embryonic stem cells. The patent, U.S. Patent No. 6,235,970, is licensed by the University of Massachusetts exclusively to us.

On August 30, 2006, the Company entered into a License and Settlement Agreement between the Company, UMass and Start Licensing, Inc. ("Start") relating to the settlement of the patent interference actions most recently described above ("Geron-Related Proceedings"). The terms of the License and Settlement Agreement include an initial payment to the Company of \$500,000 and milestone payments to the Company of up to \$750,000. In addition, Start, Geron Corporation and Roslin Institute ("Roslin") each agree not to sue the Company under certain patent applications owned by Roslin. In exchange, the Company and the University agreed to dismiss their appeal in the Geron-Related Proceedings with prejudice, transfer control of related University patents to Start and pay certain legal fees. Under the terms of the settlement agreement, the Company retained its rights under the University patents in the human field.

#### DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS

Our executive officers, key employees and directors are described below. There are no family relationships among our executive officers or directors.

Name	Age	Position
Michael D. West, Ph.D.	53	President, Chief Scientific Officer and member of the Board of Directors
William M. Caldwell, IV	58	Chief Executive Officer and Chairman of the Board of Directors
Robert P. Lanza, M.D.	50	Vice President of Medical and Scientific Development
Jonathan F. Atzen	42	Senior Vice President, General Counsel and Secretary
Robert W. Peabody	52	Vice President of Grant Administration
Ivan Wolkind	39	Vice President of Finance and Chief Accounting Officer
Pedro Huertas, M.D., Ph.D.	52	Chief Development Officer
Alan C. Shapiro, Ph.D.	60	Member of Board of Directors
Erkki Ruoslahti, M.D., Ph.D.	67	Member of Board of Directors
Alan G. Walton, Ph.D., D.Sc.	70	Member of Board of Directors

Michael D. West, Ph.D. is our President, Chief Scientific Officer and member of the Board of Directors. Dr. West has extensive academic and business experience in age-related degenerative diseases, telomerase molecular biology and human embryonic stem cell research and development. Before joining ACT in 1998, Dr. West founded Geron Corporation, and from 1990 to 1998 served as a Director and senior executive officer of Geron, where he initiated and managed programs in telomerase diagnostics, telomerase inhibition, telomerase-mediated therapy and human embryonic stem cell research. After leaving Geron, Dr. West co-founded and served as Chairman of Origen Therapeutics, a company focused on the development of avian transgenic technologies. He is the inventor of patents assigned to the University of Texas Southwestern Medical Center at Dallas licensed to Geron Corporation relating to telomere biology. Dr. West receives royalties from the license of these patents. In 1999, Dr. West formed ACT Group for the purpose of acquiring a controlling interest in ACT. Dr. West received a B.S. Degree from Renselaer Polytechnic Institute in 1976, an M.S. Degree in Biology from Andrews University in 1982 and a Ph.D. from Baylor College of Medicine in 1989. Dr. West is also a director of Biotime, Inc., a reporting company, and a director of the Life Extension Foundation, and the privately held company BioMarker Pharmaceuticals, Inc. Dr. West is not an officer or director of any other reporting company.

William M. Caldwell, IV is our Chief Executive Officer and Chairman of the Board of Directors. He has a 30-year management career working with emerging technologies and restructuring distressed corporate environments. During his career he has served in senior executive positions both in marketing and finance. He has worked with Booz Allen and Hamilton; the Flying Tiger Line Inc.; Van Vorst Industries; and Kidder Peabody. He started a firm specializing in strategy and financial planning which was instrumental in restructuring over \$1.0 billion of debt for over twenty companies and partnerships. He was a pioneer in the satellite radio auctions as President of Digital Satellite Broadcasting Corporation; assisted in the financing and became President and ultimately CEO in the restructuring of CAIS Internet, and has advised corporations, both public and private, in technology, telecommunications, retailing, real estate, hospitality, publishing, and transportation. He received his B.A. degree from the University of Southern California and was a Multinational Enterprise Fellow at the Wharton School of Finance. He serves as a director of Lee Pharmaceuticals and King Koil Franchising Corp. Mr. Caldwell is not an officer or director of any other reporting company.

Robert P. Lanza, M.D. is our Vice President of Medical and Scientific Development. Dr. Lanza has over 20 years of research and industrial experience in the areas of tissue engineering and transplantation medicine. Before joining ACT in 1998, from 1990 to 1998, Dr. Lanza was Director of Transplantation Biology at BioHybrid Technologies, Inc., where he oversaw that company s xenotransplantation and

bioartificial pancreas programs. He has edited or authored sixteen books, including Principles of Tissue Engineering (2d ed. co-edited with R. Langer and J. Vacante), Yearbook of Cell and Tissue Transplantation, One World The Health & Survival of the Human Species in the Twenty-First Century, and Xeno: The Promise of Transplanting Animal Organs into Humans (co-authored with D.K.C. Cooper). Dr. Lanza received his B.A. and M.D. Degrees from the University of Pennsylvania, where he was both a University Scholar and Benjamin Franklin Scholar. Dr. Lanza is not an officer or director of any other reporting company.

Jonathan F. Atzen is our Senior Vice President and General Counsel. Mr. Atzen joined the Company in 2005. Prior to joining the Company, Mr. Atzen was an attorney at Heller Ehrman/Venture Law Group LLP and worked as a corporate/securities attorney for other large international law firms including Brobeck, Phleger & Harrison LLP and Morrison & Foerster LLP. His corporate practice has focused on the representation of emerging growth and established technology companies in such industries as life sciences, semiconductors, wireless communications, software and alternative energy technologies. Mr. Atzen has provided general corporate counsel to public companies with respect to securities offerings including initial public offerings, secondary offerings, PIPEs and spin-offs, and reporting and compliance matters under the Securities Exchange Act of 1934. Mr. Atzen also has experience in public and private company mergers and acquisitions. He received his B.A. degree in economics from the University of California at Santa Barbara and his J.D. from Loyola Law School. Mr. Atzen is a director of Genesis Bioventures, Inc., a reporting company.

Robert W. Peabody is our Vice President of Grant Administration. Mr. Peabody joined the company on a full time basis in February 2005 as Vice-President, Grant Administration. Prior to this and for the last 14 years he was a Regional Controller of Ecolab, Inc., a Fortune 500 specialty chemical manufacturing and service company. Mr. Peabody has extensive experience in biotechnology investing and aiding in the start-ups of such companies as Geron Corporation, Origen Therapeutics, and ACT Group. Mr. Peabody also served as a member of the Board of Directors of ACT Group prior to its dissolution. Mr. Peabody received a Bachelors Degree in Business Administration from the University of Michigan and is a Certified Public Accountant. Mr. Peabody is not an officer or director of any other reporting company.

Ivan Wolkind is our Vice President of Finance and Chief Accounting Officer. Prior to joining the Company in March 2005, Mr. Wolkind served as the Executive Vice President of Finance and Chief Financial Officer for Eyematic, a technology company providing software solutions for delivering animated content to cell phones. Between 1999 and July 2001, Mr. Wolkind was the Chief Financial Officer for eLease, a company providing software solutions and back-end automation for the capital equipment leasing market. Prior to his appointment at eLease, Mr. Wolkind served as the Vice President of Finance for Ventro Corporation, where he was instrumental in the raising of capital in the company s initial public offering and subsequent debt offerings. Before his tenure at Ventro Corporation, Mr. Wolkind served as the Vice President of Finance at Onsale, Inc., a publicly traded Internet auction company. Prior to joining Onsale, he held key finance positions at two other companies after leaving KPMG, where he had worked in the financial services and banking audit group. Mr. Wolkind qualified as a Chartered Accountant in the United Kingdom. Mr. Wolkind is not an officer or director of any other reporting company.

Pedro Huertas, M.D., Ph.D. is our Chief Development Officer. Prior to joining the Company in February 2007, Dr. Huertas was Chief Strategy and Development Officer at Amicus Therapeutics Inc., where his duties included oversight of preclinical and clinical development activities, R&D and product development. He served as acting Chief Medical Officer at Stemcells Inc., where he designed stem cell-based therapeutics initiatives, and handled regulatory affairs, including the successful filing of an Investigational New Drug (IND) application and other interactions with the FDA. Dr. Huertas also served as Chief Medical Officer for Novazyme which was acquired and prior to that served as a Director of Strategic Development at Genzyme Corporation.

Alan C. Shapiro, Ph.D. is a member of our Board of Directors. He adds more than 30 years experience in corporate and international financial management to Advanced Cell Technology. Dr. Shapiro is currently the Ivadelle and Theodore Johnson Professor of Banking and Finance at the Marshall School of Business, University of Southern California, where he previously served as the Chairman of the Department of Finance and Business Economics, Marshall School of Business. Prior to joining the University of Southern California, Dr. Shapiro taught as an Assistant Professor at the University of Pennsylvania, Wharton School of Business, and has been a visiting professor at Yale University, UCLA, the Stockholm School of Economics, University of British Columbia, and the U.S. Naval Academy. Dr. Shapiro has published over 50 articles in such academic and professional journals as the Journal of Finance, Harvard Business Review, and the Journal of Business, among many others. He frequently serves as an expert witness in cases involving valuation, economic damages, international finance, takeovers, and transfer financing through Trident Consulting Group LLC. He received his B.A. in Mathematics from Rice University, and a Ph.D. in Economics from Carnegie Mellon University. Dr. Shapiro is a trustee of Pacific Corporate Group s Private Equity Fund and also serves as a director of Remington Oil and Gas Corporation, a reporting company traded on the New York Stock Exchange.

Erkki Ruoslahti, M.D., Ph.D. has served as a director since November 2005. Dr. Ruoslahti joined The Burnham Institute in 1979 and served as its President from 1989 to 2002. Dr. Ruoslahti is the recipient of the 2005 Japan Prize for his work in cell biology. Dr. Ruoslahti s other honors include the Gairdner Prize, and membership in the U.S. National Academy of Sciences, Institute of Medicine, and American Academy of Arts and Sciences. He is a Knight of the Order of the White Rose of Finland. Dr. Ruoslahti earned his M.D. and Ph.D. from the University of Helsinki in Finland. After postdoctoral training at the California Institute of Technology, he held various academic appointments in Finland and at City of Hope National Medical Center in Duarte, California. Dr. Ruoslahti s research has been the basis of several drugs currently on the market or in clinical trials. He has been a founder and director of several biotechnology companies. Dr. Ruoslahti is not an officer or director of any other reporting company.

Alan G. Walton, Ph.D., D.Sc. has served as a director since November 2005. Since 1987, Dr. Walton has been a general partner of Oxford Bioscience Partners, a venture capital firm investing in life sciences enterprises. Prior to joining Oxford Bioscience Partners, Dr. Walton was President and Chief Executive Officer of University Genetics Co. Dr. Walton serves on the board of directors of Alexandria Real Estate Equities, Inc., Acadia Pharmaceuticals, Inc., and Avalon Pharmaceuticals, Inc. He previously has served as the Chairman of the Board of Directors or as a Director for numerous private and public biotechnology companies, including Human Genome Sciences and Gene Logic Inc. He was a professor at Case Western Reserve University and Harvard Medical College from 1961 to 1981 and a member of President Carter s Science Advisory Committee from 1976 to 1977. Dr. Walton holds a Ph.D. in Physical Chemistry, a D.Sc. in Biological Chemistry and a B.S. in Chemistry, each from the University of Nottingham and in 2005 received an honorary LLD degree in recognition of his lifetime achievement in life sciences, also from the University of Nottingham. Dr. Walton also has been awarded an Adjunct Professorship from Case Western Reserve University.

#### SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

#### Beneficial Ownership of Directors, Officers and 5% Stockholders

The following table sets forth certain information regarding the beneficial ownership of our common stock as of December 31, 2006. On such date, 39,818,070 shares of common stock were outstanding. Beneficial ownership is determined in accordance with the applicable rules of the Securities and Exchange Commission and includes voting or investment power with respect to shares of our Common Stock. The information set forth below is not necessarily indicative of beneficial ownership for any other purpose, and the inclusion of any shares deemed beneficially owned in this table does not constitute an admission of beneficial ownership of those shares. Unless otherwise indicated, to our knowledge, all persons named in the table have sole voting and investment power with respect to their shares of common stock, except, where applicable, to the extent authority is shared by spouses under applicable state community property laws.

The following table sets forth information regarding beneficial ownership of our capital stock as of December 31, 2006 by:

- each person, or group of affiliated persons, known to us to be the beneficial owner of more than 5% of the outstanding shares of our common stock;
- each of our directors and named executive officers; and
- all of our directors and executive officers as a group.

	Number of Shares	
Name and Address of Beneficial Owner	Beneficially Owned	Percentage
5% or Greater Stockholders:		
ATP Capital LP(1)	2,705,614	6.9 %
Anthem Ventures Fund, LP(2)	4,663,812	11.2 %
Gary D. Aronson(3)	2,493,795	6.3 %
Directors and Named Executive Officers		
Michael D. West, Ph.D., President, Chief Scientific Officer, and Director	3,266,375 (4)	7.7 %
William M. Caldwell, IV, Chief Executive Officer and Chairman of the Board of Directors	3,319,094 (5)	7.8 %
Robert P. Lanza, M.D, Vice President of Medical & Scientific Development	1,360,425 (6)	3.4 %
Robert Peabody, Vice President Grant Administration	471,118 (7)	1.2 %
Jonathan F. Atzen, Sr. Vice President, General Counsel and Secretary	502,500 (8)	1.3 %
Ivan Wolkind, Vice President of Finance and Chief Accounting Officer	143,744 (9)	*
James G. Stewart, Sr. Vice President and Chief Financial Officer	314,276 (10	)) *
Alan C. Shapiro, Ph.D., Director	1,207,696 (11	3.0 %
Alan G. Walton, Ph.D., D.Sc., Director	100,000 (12	2) *
Erkki Ruoslahti, M.D., Ph.D., Director	120,086 (13	8) *
Directors and Executive Officers as a Group (10 persons)	10,805,314 (14	22.0 %

<sup>\*</sup> Less than 1%

- (1) The address of ATP Capital LP is 60 East 42nd Street, Suite 3410, New York, NY 10165.
- (2) The address of Anthem Ventures Fund, LP is 225 Arizona Ave., Suite 200, Santa Monica, CA 90401. Includes (i) 2,156,123 shares issuable upon exercise of certain warrants and upon conversion of the debentures, and (ii) 157,747 shares owned by certain of its affiliates, all of which it may be deemed the beneficial owner.
  - (3) The address of Gary D. Aronson is 774 Mays Boulevard, 10-PMB 128, Incline Village, NV 89451.

- (4) Includes (i) 3,156,375 shares subject to stock options held directly by Dr. West that are currently exercisable or exercisable within 60 days of December 31, 2006, and (ii) indirect ownership of 110,000 shares subject to warrants held by the spouse of Dr. West that are currently exercisable or exercisable within 60 days of December 31, 2006 and of which Dr. West may be deemed the beneficial owner.
- (5) Includes (i) 2,262,972 shares subject to stock options that are currently exercisable or exercisable within 60 days of December 31, 2006 that are held directly by Mr. Caldwell, (ii) indirect ownership of 486,000 shares subject to currently exercisable warrants awarded to Andwell, LLC, an entity affiliated with Mr. Caldwell and of which he may be deemed the beneficial owner, (iii) indirect ownership of 246,748 shares held by the spouse of Mr. Caldwell and of which Mr. Caldwell may be deemed the beneficial owner, and (iv) indirect ownership of 323,374 shares subject to warrants held by the spouse of Mr. Caldwell that are currently exercisable or exercisable within 60 days of December 31, 2006 and of which Mr. Caldwell may be deemed the beneficial owner.
- (6) Includes 1,260,425 shares subject to stock options that are currently exercisable or exercisable within 60 days of December 31, 2006.
- (7) Includes 448,325 shares subject to stock options that are currently exercisable or exercisable within 60 days of December 31, 2006.
- (8) Includes (i) 227,500 shares subject to stock options that are currently exercisable or exercisable within 60 days of December 31, 2006, and (ii) 75,000 shares subject to currently exercisable warrants.
- (9) Includes 43,744 shares subject to stock options that are currently exercisable or exercisable within 60 days of December 31, 2006.
- (10) Includes 306,461 shares subject to stock options that are currently exercisable or exercisable within 60 days of December 31, 2006 and (ii) indirect ownership of 7,815 shares subject to stock options held by the spouse of Mr. Stewart that are currently exercisable or exercisable within 60 days of December 31, 2006 and of which Mr. Stewart may be deemed the beneficial owner. Effective as of August 17, 2006, Mr. Stewart resigned as Chief Financial Officer and terminated his employment arrangement with the Company.
- (11) Includes (i) indirect ownership of 166,531 shares and 621,690 shares subject to convertible debentures held by The Shapiro Family Trust and of which Dr. Shapiro may be deemed the beneficial owner, (ii) 272,446 shares subject to warrants held by The Shapiro Family Trust and of which Dr. Shapiro may be deemed the beneficial owner, and (iii) 100,000 shares subject to stock options that are currently exercisable or exercisable within 60 days of December 31, 2006.
- (12) Includes 100,000 shares subject to stock options that are currently exercisable or exercisable within 60 days of December 31, 2006.
- (13) Includes 100,000 shares subject to stock options that are currently exercisable or exercisable within 60 days of December 31, 2006.
- (14) Includes 9,902,127 shares subject to stock options, warrants or convertible debentures that are currently exercisable or exercisable within 60 days of December 31, 2006.

#### DESCRIPTION OF SECURITIES

Pursuant to our Certificate of Incorporation, we are authorized to issue 500,000,000 shares of common stock. Below is a description of our common stock, shares of which are being offered pursuant to this prospectus.

#### Common Stock

The holders of our common stock are entitled to one vote per share on each matter submitted to a vote at a meeting of our stockholders, except to the extent that the voting rights of our shares of any class or series of stock are determined and specified as greater or lesser than one vote per share in the manner provided by our certificate of incorporation. The shares of our common stock do not carry cumulative voting rights in the election of directors. Our stockholders have no pre-emptive rights to acquire additional shares of our common stock or other securities. Our common stock is not subject to redemption rights and carries no subscription or conversion rights. In the event of liquidation of our company, the shares of our common stock are entitled to share equally in corporate assets after satisfaction of all liabilities. All shares of our common stock now outstanding are fully paid and non-assessable. Our bylaws authorize the board of directors to declare dividends on our outstanding shares. Our common stock holders are not personally liable for the payment of our debts. Our shares of common stock are penny stock as defined in Rule 3a51-1 of the Securities and Exchange Commission. This designation may adversely affect the development of any public market for our common stock or, if such a market develops, its continuation. Broker-dealers are required to personally determine whether an investment in penny stock is suitable for customers.

Interwest Transfer Company, Inc. acts as our transfer agent and registrar for our common stock.

#### INTEREST OF NAMED EXPERTS AND COUNSEL

#### **Experts**

The consolidated financial statements of Advanced Cell Technology, Inc. as of December 31, 2006 and for each of the two years in the period ended December 31, 2006 as included in this prospectus have been so included in reliance on the report of Stonefield Josephson, Inc., an independent registered public accounting firm, given upon the authority of said firm as experts in accounting and auditing.

#### Counsel

The validity of the issuance of the shares of common stock offered hereby and other legal matters in connection herewith have been passed upon for us by Pierce Atwood LLP, Portland, Maine. On July 1, 2003, we issued a promissory note with a face amount of \$339,000 to Pierce Atwood LLP as a payment of fees due them. The annual interest rate on the note was 10%. The note was due on October 1, 2003. During the first quarter of 2005, the note, plus accrued interest of \$53,675, was settled through:

- the issuance of 105,177 preferred shares and 52,589 warrants pursuant to the stock offering collectively valued at \$89,400.
- a cash payment of \$100,000, and
- a new note with a face value of \$150,000, which has been paid in full.

# DISCLOSURE OF COMMISSION POSITION OF INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our directors and officers are indemnified by our bylaws against amounts actually and necessarily incurred by them in connection with the defense of any action, suit or proceeding in which they are a party by reason of being or having been directors or officers of the Company or ACT. Our certificate of incorporation provides that none of our directors or officers shall be personally liable for damages for breach of any fiduciary duty as a director or officer involving any act or omission of any such director or officer. Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to such directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

In the event that a claim for indemnification against such liabilities, other than the payment by us of expenses incurred or paid by such director, officer or controlling person in the successful defense of any action, suit or proceeding, is asserted by such director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

#### DESCRIPTION OF BUSINESS

*Overview.* We are a biotechnology company focused on developing and commercializing human stem cell technology in the emerging field of regenerative medicine.

We have developed and maintain a portfolio of patents and patent applications that form the proprietary base for our research and development efforts in the area of embryonic stem cell research. We believe that our intellectual property represents one of the strongest portfolios in the field. We employ a team including some of the world s leading scientists in the field of stem cell research and development. We believe our technology base, in combination with our know-how, provides a competitive advantage and will facilitate the successful development and commercialization of products for use in treatment of a wide array of chronic degenerative diseases and in regenerative repair of acute disease, such as trauma, infarction and burns.

Our belief that our intellectual property represents one of the strongest portfolios in the field is supported by:

- the size, date and pace of filing, and focus of the portfolio,
- the relative immaturity of this field of study, and
- the limited number of truly competitive portfolios of intellectual property.

Regenerative medicine is a new and emerging field of study involving development of medical therapies based on advances in stem cell and nuclear transfer technology. We have developed and maintain a broad portfolio with ownership or exclusive licensing of over 30 issued patents and over 280 patent applications in the field of regenerative medicine and related technologies. This significant volume of patents and patent licenses has been developed in the short span of approximately the past seven years.

Although we have strong competitors in this field, there are a limited number of companies operating in this field. We believe our intellectual property portfolio compares favorably with those of our competition based upon its size, focus and filing dates.

With respect to the focus of our portfolio, we believe that somatic cell nuclear transfer and chromatin transfer are, and will prove to be, one of the technological keys to successful development of stem cell therapies. See Cellular Reprogramming below. Our patent rights include one of only two core patent estates supporting somatic cell nuclear transfer technology and chromatin transfer technology. We believe that only one other known patent estate, held by Roslin Institute, derived from the cloning of Dolly, the first cloned sheep, is comparable to ours. However, in contrast with Roslin, we own or have license to numerous other technologies for dealing with transplant rejection, including means of activating oocytes during nuclear transfer, parthenogenesis, transdifferentiation, and dedifferentiation. Our intellectual property also includes patent rights and applications for specific applications of stem cell technology in producing retinal pigment epithelium, hemangioblasts, and dermal cells, and numerous methods and compositions for the use of these technologies and derived cells in heart disease, immunodeficiency estates and cancer.

This is a young and emerging field. There can be no assurances that our intellectual property portfolio will ultimately produce viable commercialized products and processes; however, at this early stage of

development, our intellectual property and science team are well-recognized leaders in the field. See RISK FACTORS Risks Relating to Our Technology on page 8 of this prospectus.

All of our research efforts to date are at the level of basic research or in the pre-clinical stage of development. We are focused on leveraging our key assets, including our intellectual property, our scientific team, our facilities and our capital, to accelerate the advancement of our stem cell technologies. In addition, we are pursuing strategic collaborations with members of academia, industry and foundations to further accelerate the pace of our research efforts. We are currently headquartered in Alameda, California, with additional research and development offices in Worcester, Massachusetts. We recently established a research facility in California, where voters passed Proposition 71 in November 2004, which is described more fully under the heading *California Proposition 71* below.

The Field of Regenerative Medicine. The emerging field of treatment called regenerative medicine or cell therapy refers to treatments that are founded on the concept of producing new cells to replace malfunctioning or damaged cells as a vehicle to treat disease and injury. Our focus is the development of effective methods to generate replacement cells from stem cells. Many significant and currently untreatable human diseases arise from the loss or malfunction of specific cell types in the body. This is especially true of diseases associated with aging such as Alzheimer's disease, Parkinson's disease, type II diabetes, heart failure, osteoarthritis, and aging of the immune system, known as immunosenescence. This is also true for medical conditions resulting from damage to cells due to acute disease, such as trauma, infarction and burns. We believe that replacing damaged or malfunctioning cells with fully functional ones may be a useful therapeutic strategy in treating many of these diseases and conditions.

A stem cell is a cell that has the ability to branch out and change, or differentiate, into two or more different cell types. Stem cells are self-renewing primitive cells that have the ability to develop into functional, differentiated cells. In general, there are two broad categories of stem cells: adult stem cells and embryonic stem cells. Adult stem cells are derived from various tissues in the human body. Because they can branch out into many different cell types, they are referred to as multipotent. Multipotent means these cells develop into multiple, but not all, types of cells in the body. Embryonic stem cells, referred to as ES cells, which are derived from pre-implantation embryos, are unique because they are pluripotent, which means that they can develop into all cells and tissues in the body, and they self-renew indefinitely in their undifferentiated state. The ability of ES cells to divide indefinitely in the undifferentiated state without losing pluripotency is a unique characteristic that distinguishes them from all other stem cells discovered to date in humans. Because of the potential of ES cells, one of our primary efforts is the development and commercialization of ES cell based technologies.

Since the discovery of the human ES cell, medical researchers worldwide have generally recognized the significance of this new technology and have begun to focus research on the translation of this discovery into important new therapies. Specifically, researchers have focused on several key challenges including:

- isolating and purifying cell lines,
- growing stable cell lines in culture for long periods without mutations,
- manufacturing cell lines in numbers sufficient for therapy,
- differentiating ES cells into all of the cell types desired for therapies, and
- solving the potential rejection of ES cells used in therapies due to immuno-incompatibility with the patient.

We believe that solving the potential rejection of ES cells in patients is the greatest scientific obstacle to developing successful therapeutics. Our research and technologies are focused on solving this obstacle by creating stem cell therapeutics with compatible tissues. Compatible tissues are referred to as being histocompatible.

We believe the potential markets for regenerative medicine and stem cell therapy are large. The table below summarizes the potential United States patient populations which we believe may be amenable to cell or organ transplantation and represent target markets for products generated through our regenerative medicine technology.

#### POTENTIAL U.S. PATIENT POPULATIONS FOR CELL-BASED THERAPIES

Medical Condition	Number of Patients*
Cardiovascular disease	70 million
Autoimmune disease	50 million
Diabetes	18 million
Osteoporosis	10 million
Cancer	10 million
Alzheimer s disease	4.5 million
Parkinson s disease	1 million
Burns (severe)	1.1 million
Spinal-cord injuries	0.25 million
Birth defects	0.15 million/year

\* These estimates are based on the most current patient estimates published by the following organizations as of April 2005: the American Heart Association, the American Autoimmune Related Diseases Association, SEER (Surveillance, Epidemiology and End Result), American Burn Association, March of Dimes, the Alzheimer s Association, the Alzheimer s Disease Education & Referral Center (National Institute on Aging), the National Institutes of Health s National Institute on Neurological Disorders and Stroke, the Foundation for Spinal Cord Injury Prevention, Care & Cure, the Centers for Disease Control and Prevention, the American Association of Diabetes Educators, the Northwest Parkinson s Foundation and the Parkinson s Action Network.

Our Technology. The ability to produce embryonic stem cells that are immunologically compatible with the patient is the hallmark and the strength of our technology platform. We believe our technology platform will enable the transformation of a patient s cells into an embryonic state where those cells can be differentiated into specific therapeutically relevant cell types that are genetically identical to the patient. We believe our technology may also enable the production of stem cell lines, from sources external to the patient, that have a sufficiently high level of histocompatibility to be useful in making cell therapies readily accessible to a large segment of the patient population, without the need for exact genetic matching of tissues. As a result, our technology avoids reliance on more limited approaches that involve use of cell lines that are not histocompatible with the recipient, or therapies based upon use of adult stem cells.

In August 2001, the President of the United States set guidelines for federal funding of research on embryonic stem cells from human embryos created by in-vitro fertilization, referred to as IVF. IVF-ES cells have the drawback that they are not genetically matched to the recipient patient. These ES cells are allogeneic. The word allogeneic literally means—other DNA type. Therapies using allogeneic cell lines can result in immune system incompatibilities where the host immune system attacks and rejects the transplanted cells or the transplanted cells attack the host. These incompatibilities may be partially suppressed with powerful immunosuppressive drugs, but the side effects can be severe and result in life-threatening complications. As a result, these incompatibilities will generate significant inefficiencies in the application of cell therapies.

Our approach also differs from that of technologies limited to the use of adult stem cells. The principal drawbacks to therapies based exclusively on the use of adult stem cells are that these cells are neither pluripotent, nor youthful. Adult stem cells are multipotent, which means that, unlike pluripotent stem cells, they cannot be differentiated into all cell types of the human body. Their usefulness is inherently limited in this regard. With respect to their lack of youthful characteristics, adult stem cells are intrinsically mortal. Cellular aging is caused by shortening telomeres, which are the ends of chromosomes. ES cells are immortal, telomerase positive cells. Through nuclear transfer, we have been successful in regenerating cell lifespan through the reactivation of telomerase, an enzyme concerned with the formation, maintenance and renovation of telomeres.

The strategic focus of our technology is to produce cell lines that are both histocompatible with the patient and pluripotent. We have numerous proprietary technologies that we believe will generate histocompatible, pluripotent stem cells for patient-specific application. These cells maximize the potential for effective use as transplants to replace diseased or destroyed cells in human patients. If successfully developed, our cellular reprogramming technologies will make it possible to produce cells that have the proliferative capacity of young cells, have specific therapeutic application, and are immunologically compatible with the patient.

All of our technologies are at the level of basic research or in the pre-clinical stage of development.

*Our Research Programs*. Our research programs are divided into three core categories: cellular reprogramming, our reduced complexity program, and stem cell differentiation. Each of these core areas of focus are discussed below.

Cellular Reprogramming. This research program involves development of therapies based on the use of genetically identical pluripotent stem cells generated by our cellular reprogramming technologies. These technologies can be used to generate patient-specific pluripotent cells and tissues for transplantation. We believe our technology platform will enable the transformation of a patient s cell into pluripotent ES cells that are histocompatible with the patient and have the potential to be differentiated into any of the over 200 different human cell types that may be therapeutically relevant in treating diseased or destroyed tissues in human patients. We expect that our cellular reprogramming technologies will offer a new avenue for the introduction of targeted genetic modifications in cells and for the regeneration of cell lifespan, thereby making youthful cells available for aging patients. The combination of these advances, the ability to produce young cells of certain kinds that are histocompatible with the patient, is a core potential application of our technology. We believe these cellular reprogramming technologies will be effective therapies where there is time to prepare customized therapy through reprogramming of the patient s own cells.

Some of the technologies that support our cellular reprogramming program are somatic cell nuclear transfer, chromatin transfer, and fusion technologies.

Somatic cell nuclear transfer, referred to as SCNT, refers to the process wherein a body cell is transferred to an egg cell from which the nuclear DNA has been removed. This results in the body cell being reprogrammed by the egg cell. This reprogramming transforms the cell from the type of cell it was, for instance a skin cell, into an embryonic cell with the power to become any cell type in the body. A related technology is called chromatin transfer. Through this technology, the DNA and attached proteins, or chromatin, of the somatic cell is reprogrammed prior to transfer into an egg cell. Chromatin transfer has the potential to improve the efficiencies and therefore reduce the cost of nuclear transfer. We believe that one critical advantage of our proprietary SCNT and chromatin transfer technologies is that the cells are rejuvenated by returning the cell to a youthful state. This is important because these youthful cells will have the proliferative capacity of young cells. These healthy replacement cells, which would be genetically identical to the patient s own cells, would then be used for cell transplantation.

Our fusion technologies involve the fusion of the cytoplasm of one cell into another. In the same manner that the cytoplasm of an egg cell is capable of transforming any cell back to an embryonic state, the fusion of the cytoplasm of other cell types, including differentiated cell types (such as blood cells) is capable of reprogramming another cell type, such as a skin cell. These technologies have the potential of transforming a cell from a patient into another medically-useful cell type also identical to the patient. They also have the potential to fuse the cytoplasm of undifferentiated cells, such as embryonic stem cells, with somatic cells to transport the somatic cell DNA back to pluripotency. We believe that the fusion technology we are developing can be developed into as broad and powerful a technique as SCNT, producing histocompatible, youthful stem cells that are multi and potentially even pluripotent. If successfully developed, this technology may also provide a pathway that does not utilize human egg cells which would reduce the cost of the procedure and increase the number of patients that could benefit from its implementation.

Reduced Complexity Program. We believe our proprietary technology may be applied to generate readily available cell therapy products for patients with acute medical needs that do not allow time for patient-specific reprogramming of cells. We believe several of our proprietary technologies may be used to generate a wide array of readily available stem cell therapies for rapid deployment across a broad patient population without the need for time-consuming patient-specific reprogramming of cells. Current organ and tissue transplantation technology requires that there be a high degree of compatibility between the donated organ or tissue and the recipient. Genes for histocompatibility antigens, or HLA genes, play a critical role in achieving donor/recipient compatibility and resulting transplant success. We are developing our reduced complexity technology with the goal of assembling a bank of stem cell lines that are homozygous in the HLA genes.

We believe the result of this technology will be that a bank of at most a few hundred cell lines will provide a close enough match that, together with immunosuppressive drugs, stem cell therapies for certain common applications will be achievable in most patients. One example of a potential application is introduction of stem cell therapy on a time-sensitive basis in the case of heart attack to repair damaged heart tissue. Timely, cost-effective introduction of cell therapies will be critical to commercial application. Without reduced complexity technology, producing a readily-available, off-the-shelf supply may require many hundreds of thousands of cell lines.

We also believe that reduced complexity applications resulting from our research will offer an important research tool in the field of regenerative medicine by offering readily available cell lines for researchers produced at a level of quality and quantity appropriate for clinical applications. We believe our ability to genetically modify cells, while assuring quality control of the cell lines, will give us a decided advantage over our competition in providing readily available, closely matched cell lines at lower cost.

We have several different technologies we believe may be used to create a bank of stem cells with reduced complexity in the HLA genes. One of several such technologies is called parthenogenesis. Parthenogenesis is similar to somatic cell nuclear transfer; however there is no somatic cell being transferred. We use our proprietary technology to take one egg cell and stimulate it to begin cell division as though it has been fertilized. This results in a parthenote or a blastocyst with a duplicate set of the egg s chromosomes from which we can harvest ES cells. This duplication gives a parthenote a full complement of genes. We believe parthenogenesis and certain of our other technologies could be used to generate a master cell bank of clean homozygous stem cell lines that could provide matches for a majority of the U.S. patient population.

**Stem Cell Differentiation.** Regenerative medicine requires that stem cells, from whatever source derived, be differentiated, or re-differentiated, into specific body cell types and then physically transplanted into a patient. Differentiation into tissues such as cardiac muscle, blood, and other tissues occurs spontaneously in ES cells being cultured in a dish. Successful application of stem cell technology

will require control over the specific kinds of cells into which stem cells differentiate. Control of differentiation and the culture and growth of stem and differentiated cells are important current areas of research for us. Also, some chemicals, such as retinoic acid, can be used to trigger differentiation into specific cell types such as nerve cells. We intend to pursue differentiation approaches both in-house and through collaborations with other researchers who have particular interests in, and skills related to, cellular differentiation. These efforts include using both animal and human stem cell lines. Our research in this area includes projects focusing on developing many different cell types that may be used in the future to treat a wide range of diseases. Currently our researchers are working on projects to generate stable cell lines including retinal pigment epithelium, or RPE, cells, skin cells, and hemangioblast cells. In the future, our researchers may also focus on various projects to generate other cell types, including neuronal, lung, heart, liver and pancreatic beta cells.

Our researchers were the first to report the successful generation of several stable lines of retinal pigment epithelium cells from human ES cells. Our scientific team has refined our ability to purify and establish banks of these cell lines. We are currently conducting pre-clinical research in the restoration of visual loss in small animal models to determine if these cells may be used to treat disorders such as macular degeneration and retinitis pigmentosa.

Our researchers are also focusing on development of technology and know-how to consistently isolate, purify and develop skin cells with patterns of gene expression that are analogous to early embryonic skin. Early embryonic skin is capable of regenerating after wounding without scar formation. We believe that these types of cells may provide a means of improving wound repair in surgery, burns, and chronic skin ulcers.

Additionally, our research is also focused on an important cell type called the hemangioblast. Hemangioblasts are a newly-characterized stem cell capable of differentiating into both hematopoietic, meaning blood cell forming, and angiogenic, meaning blood vessel endothelium forming, cells. We believe it will be possible to utilize hemangioblast cells in engraftment to repair age-related endothelial dysfunction associated with numerous significant age-related diseases, including cardiovascular disease, stroke, and even perhaps cancer. We have demonstrated in a mouse model that nuclear transfer-derived hemangioblast cells were able to regenerate myocardium in an infarcted mouse heart. In addition, we have recently completed a project using nuclear transfer technology to produce hemangioblasts in a bovine model. The nuclear transfer-derived hemangioblasts were transplanted into the original adult animals and persisted and multiplied in the blood and lymph supply of those cows, demonstrating a significant competitive advantage over adult stem cells. We believe that demonstrating long-term success of these techniques in animal models may translate into future applications in humans. Results from our on-going pre-clinical research programs will ultimately determine what clinical applications we choose to initially pursue in human clinical trials.

**Potential Commercial Applications of our Technologies.** We believe that, if successfully developed, stem cell-based therapy has the potential to provide treatment for a broad range of acute and chronic degenerative diseases. We believe the potential applications of cell-based therapeutics include

- hematopoietic cells for blood diseases and cancer,
- myocardial and endothelial vascular tissue for cardiovascular disease,
- skin cells for dermatological conditions,
- retinal pigment epithelium cells as treatment for macular degeneration and retinal pigmentosis,
- neural cells for spinal cord injury, Parkinson s disease and other neuro-degenerative diseases,
- pancreatic islet β cells for diabetes,

- liver cells for hepatitis and cirrhosis,
- cartilage cells for arthritis, and
- lung cells for a variety of pulmonary diseases.

While we expect that any future products will take the form of medical procedures, tangible therapeutics, or combinations thereof, we currently have no products, and the identity of our future products, if any, is dependent upon the results of our ongoing research efforts, and, therefore cannot be determined at this time.

#### Our Intellectual Property.

Our research and development is supported by a broad intellectual property portfolio. We currently own or have exclusive licenses to over 30 patents and have over 280 patent applications pending worldwide in the field of regenerative medicine and stem cell therapy. We also have non-exclusive rights to a portfolio of patents and patent applications that support our core intellectual property.

Our success will likely depend upon our ability to preserve our proprietary technologies and operate without infringing the proprietary rights of other parties. However, we may rely on certain proprietary technologies and know-how that are not patentable. We protect our proprietary information, in part, by the use of confidentiality agreements with our employees, consultants and certain of our contractors.

We maintain a disciplined patent policy and, when appropriate, seek patent protection for inventions in our core technologies and in ancillary technologies that support our core technologies or which we otherwise believe will provide us with a competitive advantage. We pursue this strategy by filing patent applications for discoveries we make, either alone or in collaboration with scientific collaborators and strategic partners. Typically, although not always, we file patent applications both in the United States and in select international markets. In addition, we plan to obtain licenses or options to acquire licenses to patent filings from other individuals and organizations that we anticipate could be useful in advancing our research, development and commercialization initiatives and our strategic business interests.

The following table identifies the issued patents we own or license that we believe currently support our technology platform.

## Owned by Advanced Cell Technology, Inc.

Number		Filing		Expiration	
Patent	Country	Date	Issue Date	Date	Title
6,808,704	United States	09/06/00	10/26/04	02/18/2021	Method for Generating Immune-Compatible Cells and
	(US)				Tissues Using Nuclear Transfer Techniques
518191	New Zealand (NZ)	10/13/00	05/10/04	10/13/2020	Method of Differentiation of Morula or Inner Cell Mass Cells and Method of Making Lineage-Defective Embryonic Stem Cells
516236	NZ	06/30/00	08/07/05	06/30/2020	Cytoplasmic Transfer to De-Differentiate Recipient Cells
782286	Australia (AU)	6/30/00	10/27/05	6/30/2020	Cytoplasmic Transfer to De-Differentiate Recipient Cells
783162	AU	09/06/2000	01/12/06	09/6/2020	Method for Generating Immune-Compatible Cells and Tissues Using Nuclear Transfer Techniques
782385	AU	10/13/00	11/3/05	10/13/2020	Method of Differentiation of Morula or Inner Cell Mass Cells and Method of Making Lineage-Defective Embryonic Stem Cells
531844	NZ	09/06/2000	02/08/05	09/06/2020	Telomere Restoration and Extension of Cell Life-Span
					in Animals Cloned from Senescent Somatic Cells
521711	NZ	04/16/2001	07/07/05	04/16/2021	Pluripotent Cells Comprising Allogenic Nucleus and
					Mitochondra
6,603,059	US	10/16/2000	08/05/2003	10/16/2020	Method of Cloning Animals
510930	NZ	03/05/1998	08/07/2003	08/05/2018	Method of Producing a Polypeptide in an Ungulate
337495	NZ	03/05/1998	10/09/2001	03/05/2018	Method of Cloning Animals
782358	AU				Method of Cloning Animals
745334	AU	02454002	00/06/1005	02/15/2012	Method of Cloning Animals
5,453,366	US	03/15/1993	09/26/1995	03/15/2013	Method of Cloning Bovine Embryos
6,011,197	US	01/28/1999	01/04/2000	01/28/2019	Method of Cloning Bovines Using Reprogrammed Non-Embryonic Bovine Cells
6,395,958	US	07/15/1999	05/28/2002	07/15/2019	Method of Producing a Polypeptide in an Ungulate
4,994,384	US	10/27/1987	02/19/1991	02/19/2008	Multiplying Bovine Embryos
5,374,544	US	01/15/1992	12/20/1994	01/15/2012	Mutated Skeletal Actin Promoter
5,496,720	US	02/10/1993	03/05/1996	03/05/2013	Parthenogenic Oocyte Activation
5,843,754	US	06/06/1995	12/01/1998	12/01/2015	Parthenogenic Bovine Oocyte Activation
6,194,202	US	03/04/1996	02/27/2001	03/04/2016	Parthenogenic Oocyte Activation
6,077,710	US	10/21/1998	06/20/2000	10/21/2018	Parthenogenic Oocyte Activation
6,680,199	US	05/22/2000	01/20/2004	05/22/2020	In Vitro Activation of Mammalian Oocytes
6,306,591	US	06/18/1998	10/23/2001	06/18/2018	Screening for the Molecular Defect Causing Spider Lamb Syndrome in Sheep
5,346,990	US	03/12/1991	09/13/1994	09/13/2011	Sex-Associated Membrane Proteins and Methods for Increasing the Probability that Offspring will be of a Desired Sex

## University of Massachusetts Exclusive License to Advanced Cell Technology, Inc.

Number		Filing		Expiration	
Patent	Country	Date	Issue Date	Date	Title
6,235,969	US	07/03/97	05/22/01	01/10/2017	Cloning Pigs Using Donor Nuclei from Non-Quiescent Differentiated Cells
6,215,041	US	01/08/98	04/10/01	01/10/2017	Cloning Using Donor Nuclei from a Non-Quiescent Somatic Cells
6,156,569	US	08/04/97	12/05/00	08/04/2017	Prolonged Culturing of Avian Primordial Germ Cells (PGCs) Using Specific Growth Factors, Use Thereof to Produce Chimeric Avians
5,994,619	US	12/16/96	11/30/99	04/01/2016	Production of Chimeric Bovine or Porcine Animals Using Cultured Inner Cell Mass Cells
5,905,042	US	04/01/96	05/18/99	04/01/2016	Cultured Inner Cell Mass Cell Lines Derived from Bovine or Porcine Embryos
521426	NZ	03/26/01	11/11/04	03/26/2021	Prion-Free Transgenic Ungulates
521026	NZ	02/26/01	01/13/05	02/26/2021	Production of Mammals which Produce Progeny of a Single Sex
2001241720	AU	2/26/01	11/23/06	2/26/2021	Production of Mammals which Produce Progeny of a Single Sex
518365	NZ	10/27/00	08/12/04	10/27/2020	Gynogenetic or Androgenetic Production of Pluripotent Cells and Cell Lines, and Use Thereof to Produce Differentiated Cells and Tissues
517609	NZ	09/14/00	06/08/04	09/14/2020	Embryonic or Stem-Like Cell Lines Produced by Cross Species Nuclear Transplantation and Method for Enhancing Embryonic Development by Genetic Alteration of Donor Cells or by Tissue Culture Conditions
519346	NZ	05/10/00	06/08/04	05/10/2020	Embryonic or Stem-Like Cell Lines Produced by Cross Species Nuclear Transplantation
759322	AU	03/02/99	07/24/03	03/02/2019	Embryonic or Stem-Like Cell Lines Produced by Cross Species Nuclear Transplantation
506808	NZ	03/02/99	03/29/04	03/02/2019	Embryonic or Stem-Like Cell Lines Produced by Cross Species Nuclear Transplantation
66					

502713	NZ	08/04/98	01/05/04	08/04/2018	Production of Avian Embryonic Germ (EG) and Embryonic Stem (ES) Cell Lines by Prolonged Culturing of PGCs Use Thereof of Cloning and Chime
502712	NZ	08/04/98	05/12/03	08/04/2018	Avian Primordial Germ Cell (PGC) Cell Line and a Method for Long Term Culturing Thereof
781128	AU	10/13/00	5/5/05	10/13/2020	Preparation and Selection of Donor Cells for Nuclear Transplantation
ZL00815685.9	China	10/13/00	7/6/05	10/13/2020	Preparation and Selection of Donor Cells for Nuclear Transplantation
742840	AU	07/01/98	08/01/02	07/01/2018	Cloning Pigs Using Donor Nuclei from Differentiated Cells
502124	NZ	07/01/98	05/12/03	07/01/2018	Cloning Pigs Using Donor Nuclei from Differentiated Cells
742363	AU	01/05/98	01/03/02	01/05/2018	Cloning Using Donor Nuclei from Differentiated Fetal and Adult Cells
334016	NZ	07/28/97	12/07/00	07/28/2017	Embryonic or Stem-Like Cell Lines Produced by Cross Species Nuclear Transplantation
784731	AU	5/10/00	9/21/06	5/10/2020	Embryonic or Stem-Like Cell Lines Produced by Cross Species Nuclear Transplantation
ZL98809874.1	China	8/4/98	4/6/05	8/4/2018	Avian Primordial Germ Cell (PCG) Cell Line and Method of Producing Chimeric Avians
717529	AU	03/24/97	07/13/00	03/24/2017	Cultured Inner Cell Mass Cell Lines Derived from Ungulate Embryos
519347	NZ	12/20/00	11/11/04	12/20/2020	Method to Produce Cloned Embryos and Adults from Cultured Cells
723457	AU	1/2/98	12/7/00	1/2/2018	Z Chromosomal Markers Derived from Chicken and Use in Chromosomal Mapping
126416	Israel	03/24/97	09/21/04	03/24/2017	Cultured Inner Cell Mass Cell Lines Derived from Ungulate Embryos
332159	NZ	03/24/97	06/08/00	03/24/2017	Cultured Inner Cell Mass Cell Lines Derived from Ungulate Embryos
67					

502129	NZ	06/24/98	06/09/05	03/24/2017	Cloning using donor nuclei from non-serum starved, differentiated cells
782846	AU	10/27/2000	12/15/05	10/27/2020	Gynogenetic or Androgenetic Production of Pluripotent Cells and Cell Lines, and Use Thereof to Produce Differentiated Cells and Tissues
1,007,633	Europe	08/04/98	10/19/05	08/04/2018	Avian Primordial Germ Cell (PGC) Cell Line and a Method for Long Term Culturing Thereof
1,019,491	Europe	08/04/98	12/07/05	08/04/2018	Production of Avian Embryonic Germ (EG) Cell Lines by Prolonged Culturing of PGPS, Use Thereof For Cloing and Chimerization
938550	Europe	03/24/97	02/22/06	02/24/2017	Cultured Inner Cell Mass Cell Lines Derived from Ungulate Embryos

#### Genzyme Transgenics Corp. Exclusive License to Advanced Cell Technology, Inc.

Number		Filing		Expiration	
Patent	Country	Date	Issue Date	Date	Title
6,580,017	US	04/23/99	06/17/03	04/23/2019	Methods of Reconstructed Goat Embryo Transfer
6,528,699	US	02/24/98	03/04/03	02/24/2018	Transgenically Produced Non-Secreted Proteins
517930	NZ	09/27/00	05/10/04	09/27/2020	Methods of Producing Cloned and Transgenic Mammals
88117	Singapore	10/16/00	03/31/04	10/16/2020	Methods of Producing a Target Molecule in a Transgenic Animal and Purification of the Target Molecule
518263	NZ	10/16/00	07/05/04	10/16/2020	Methods of Producing a Target Molecule in a Transgenic Animal and Purification of the Target Molecule

## TranXenoGen, Inc. Exclusive License to Advanced Cell Technology, Inc.

Number		Filing		Expiration	
Patent	Country	Date	Issue Date	Date	Title
5,480,772	US	02/03/93	01/02/96	02/03/2013	In vitro activation of a nucleus
5,651,992	US	02/01/94	07/29/97	07/29/2017	In vitro activation of human fetal cells
5,773,217	US	05/31/95	06/30/98	06/30/2018	Activation of sperm nuclei and activation assays
6,245,567	US	03/30/98	06/12/01	03/30/2018	Activating egg extracts and method of preparation
6,753,457	US	01/06/99	06/22/04	01/06/2019	Nuclear reprogramming using cytoplasmic extract
6,878,546	US	03/14/02	04/12/05	03/29/2023	Product and method for swelling a cell nucleus without
					DNA replication

<sup>\*</sup> Actual patent expiration dates may differ from the dates listed herein including due to patent term adjustments pursuant to 35 U.S.C. § 154(b) and 37 C.F.R. §§ 1.702-1.705.

The fundamental consequence of patent expiration is that the invention covered by that patent will enter the public domain. However, the expiration of patent protection, or anticipated patent protection, for the bulk of our portfolio is not scheduled to begin for approximately fifteen years. Due to the rapid pace of technology development in this field, and the volume of intellectual property we anticipate will be generated over the next decade, it is unlikely that the expiration of any existing patents or patent rights would have an adverse affect on our business. Due to our current stage of development, as described under the heading MANAGEMENT S DISCUSSION AND ANALYSIS OR PLAN OF OPERATION appearing elsewhere in this prospectus, our existing patent portfolio is not currently supporting a marketed product, so we will not suffer from any reduction in product revenue from patent expiration. Any actual products that we develop are expected to be supported by intellectual property covered by current patent applications that, if granted, would not expire for 20 years from the date first filed. For example, our patent rights under the University of Massachusetts license listed in the patent table, above, do not begin to expire until 2016. Due to the early stage of our business, we differ from, for example, the pharmaceutical industry where the loss of a key significant patent can result in contemporaneous loss of products, programs or revenues. As our table demonstrates, our business is at the front end of the patent protection spectrum and is not expected to be significantly impacted by expiration of existing patents or patents issued in response to existing applications.

#### Research and License Agreements.

#### Licenses of Intellectual Property to Us

The following summarizes technology licensed to us.

UMass License. On February 1, 2002 and April 16, 1996, we entered into exclusive license agreements with the University of Massachusetts. The 1996 Agreement has been amended by amendments dated September 1, 1997, May 31, 2000 and September 19, 2002. Pursuant to these agreements, the University of Massachusetts, referred to as UMass, exclusively licensed to us certain biological materials, patent rights and related technology for commercialization in specified fields. The license agreements require us to use diligent efforts to develop licensed products and licensed services and require us to pay certain royalties, minimum annual royalties, milestone payments and sublicense income to UMass. UMass received 73,263 shares of common stock of ACT as partial consideration of the license granted.

2002 License. Under the 2002 license, UMass licenses to us certain patent rights relating to the cloning of non-human animals for use in connection with the development, manufacture and sale of products and services in the field of non-human animals for agriculture, companion animals, research and diagnostic products, non-human and human therapeutics, and neutraceuticals, except production of immunoglobulin in the blood of *Bos taurus* and *Bos indicus*. We are required to pay royalties to UMass ranging from 1.5% to 2.0% based on the covered product or service. We agreed to pay minimum royalty payments of \$15,000 on the first and second anniversary of the agreement, \$20,000 on the third anniversary, \$25,000 on the fourth anniversary, and increasing to \$45,000 on the fifth anniversary and for each year thereafter. We also agreed to make milestone payments to UMass of up to \$1,630,000 upon the achievement of various development and commercialization milestones. Finally, we have agreed to pay UMass 18% of all sublicense income.

1996 License. The 1996 license covers certain patent rights, biological materials and know-how related to the cloning of non-human animals and cells for use in cell fields except the production of immunoglobulin in the blood of *Bos taurus* and *Bos indicus*. We are required to pay royalties ranging from 2.5% to 4.5% on net sales of products and services covered by the license, and minimum royalty payments in the amount of \$15,000 per year (beginning on the later of the fourth year after the effective date of the agreement or the completion of certain clinical trials) for net sales on products and services for use in human therapeutics, and \$30,000 per year (beginning in the third year after the effective date of the

agreement) for net sales on products and services for all uses other than in human therapeutics. UMass agreed to waive minimum royalty payments during any calendar year in which we fund research at UMass in the aggregate amount of \$300,000. There are no milestone payments. We agreed to pay UMass 18% of all sublicense income except for equity. With respect to equity, we are required to pay UMass an amount equal to 10% of the total equity we receive for any transfer of rights under the 1996 license.

Both the 2002 agreement and the 1996 agreement remain in effect until all issued patents within the patent rights licensed under the agreement have expired, or for a period ten years after the effective date of the agreement if no patents have issued within that ten-year period. Each party has the right to terminate the agreement upon the occurrence of a material uncured breach. We also have the right to terminate at any time for any reason with ninety days written notice.

GTC License. On September 25, 1997, we entered into a development and commercialization agreement with GTC Biotherapeutics, formerly known as Genzyme Transgenics Corporation, which was superseded by an exclusive development and license agreement dated June 8, 1999, pursuant to which each party exclusively licensed to the other certain patent rights and technology for use in defined fields and pursuant to which we agreed to provide certain related services. The agreement also requires each party to disclose to the other on a periodic basis a written report of developments relevant to the other party s field.

Under the agreement, GTC licenses certain patent rights to us that are useful to:

- human somatic cell nuclear transfer applications for therapeutic purposes and
- the cloning of animals for agricultural purposes, for the production of recombinant proteins, peptides and polypeptides for human transplantation, cells for human transplantation and tissues from human transplantation, but excluding the GTC field.

In addition, under the agreement we license to GTC certain patent rights and know-how useful to the cloning of animals for all purposes for the production of biopharmaceutical agents in milk, including, but not limited, proteins, peptides and polypeptides for pharmaceutical, neutraceutical or other use.

Under the agreement, we agreed by September 1, 2000, to produce at least 20 cloned hSA cows (cows produced with our technology that are transfected with a GTC recombinant DNA construct and contain the hSA transgene and express hSA in their milk for the purpose of transgenic production of milk products.)

We are required to pay GTC a royalty in the amount of 3% of net sales of products covered by the GTC license, which is reduced to 2% in the event net sales of such products exceed \$25 million per calendar quarter for two consecutive calendar quarters. GTC is required to pay royalties to us in the amount of 2% of net sales of products consisting of hSA produced in the milk of hSA cows, which is reduced to 1% in the event net sales exceed \$12,500,000 per calendar quarter for two consecutive calendar quarters, and 3% of net sales of products consisting of proteins other than hSA in the milk of transgenic animals, which is reduced to 2% in the event sales exceed \$25 million per calendar quarter for two consecutive quarters. GTC agreed to pay us an annual fee of \$100,000 to maintain exclusivity rights granted to GTC, which may be increased to \$1 million if GTC does not enter into agreements with third parties to develop two additional products covered by the patent rights licensed to GTC under the agreement every two years. Each party also agrees to pay to the other 25% of any and all fees obtained in connection with the sublicensing of the other party s intellectual property. There are no milestone payments under the agreement. The licenses granted in the agreement continue in force until the expiration of all patent rights included in the licenses. The agreement may be terminated by either party in the event of an uncurred breach.

*Wake Forest License.* On January 26, 2001, we entered into a materials and research data license agreement with Wake Forest University, pursuant to which WFU granted to us a worldwide, exclusive,

royalty-free, perpetual and irrevocable right and license to use certain data and stem cells and stem cell cultures created by us from biological materials provided by WFU to us for specified purposes only. The agreement allows us to utilize certain primate skin cells and ovary materials produced by WFU and transferred to us pursuant to an agreement relating to the transfer of biological materials. There are no milestone payments. There are no royalty requirements unless we desire to negotiate a commercial license for use of the biological materials provided to us by WFU. WFU received 60,000 shares of common stock of ACT Group, Inc., a now dissolved Delaware corporation referred to hereinafter as ACT Group. We have agreed to provide WFU samples of stem cells for WFU s research, education and teaching purposes and we have a first option to obtain an exclusive license to any intellectual property rights claimed by WFU in connection with the use of such stem cells. The term of the license granted is perpetual and irrevocable absent a breach by us.

WiCell License. In March 2002, we entered into an industry research license and material transfer agreement with WiCell Research Institute, Inc., referred to as WiCell, pursuant to which WiCell granted to us a non-exclusive license, with no right to sublicense, to make, use and sell or otherwise transfer certain primate embryonic stem cells and derivatives thereof for internal research purposes and to receive such primate embryonic stem cells or derivatives from third parties for internal research purposes. In consideration of the license granted to us by WiCell, we agreed to pay a license fee of \$100,000 and an annual maintenance fee of \$25,000. The license includes a grant from us to WiCell of a non-exclusive, royalty-free, irrevocable, paid-up research license under any inventions made by or for us to the extent that such inventions are a modification of an invention described in the licensed patent rights.

*Kirin License.* Effective May 9, 2006, we entered into an exclusive license agreement with Kirin Beer Kabushiki Kaisha, and its subsidiaries Aurox, LLC, Hematech, LLC and Kirin SD, Inc. (which we collectively refer to as Kirin), pursuant to which Kirin exclusively licensed to us certain patent rights, with the right to sublicense, for use in connection with the research, development, manufacture and sale of therapeutic and diagnostic human cell products. The agreement also requires Kirin to disclose to us on a periodic basis a written report of improvements to the patent rights.

In consideration of the rights and licenses granted to us, we paid Kirin an initial license fee and we have agreed to pay royalties representing a percentage of the net sales of all royalty-bearing products and services covered by the license. We are also required to pay a minimum annual royalty payment under the license. We also agreed to pay Kirin a percentage of any and all fees obtained in connection with the sublicensing of the patent rights. There are no milestone payments under the agreement. The license granted in the agreement continues in force until the expiration of all patent rights included in the license or for a period of 10 years from the effective date of the agreement if no patents have issued within that 10-year period. The agreement may be terminated by either party in the event of an uncured breach, and the agreement may also be terminated by us at any time by giving written notice to Kirin.

*TranXenoGen License.* On March 24, 2006, we entered into an exclusive sublicense agreement with TranXenoGen, Inc., pursuant to which TranXenoGen exclusively sublicensed to us certain patent rights owned by Brandeis University and technology, with the right to sublicense, for use in defined fields. The agreement also provides us with a right of first negotiation for any improvement patents controlled by TranXenoGen. The agreement is subject to certain terms and conditions included in an exclusive license agreement between TranXenoGen and Brandeis University.

#### The field includes:

- non-human cells, embryos, organs, organisms;
- any non-human cells, embryos, organs, organisms as cloned, transgenic, or cloned transgenic forms;

- any protein products and other biological molecules produced by, or prepared from non-human cells, embryos, organs, organisms or non-human cells, embryos, organs, organisms as cloned, transgenic, or cloned transgenic forms;
- any methods, technologies, or processes for the creation of any of the above;
- therapeutic and diagnostics (including products, devices, or processes) from the items covered in the first three bullets above;
- cloned, transgenic, or cloned transgenic human cells, tissues and organs not derived by human cloning (as defined in the agreement).

The field does not include the use of human reproductive cells, embryos or tissues (as defined in the agreement) or human cloning, but we are exploring the possibility of expanding the field to allow use of the licensed patent rights and technology in the human field.

In consideration of the rights and licenses granted to us, we paid TranXenoGen an initial license fee of 163,399 shares of common stock and \$150,000 in cash, and we have agreed to pay royalties of 2% or 3% (depending on the nature of the product or service) of the net sales of all royalty-bearing products and services covered by the license. Under the agreement we are also required to pay an annual license maintenance fee of \$25,000, which is creditable against royalty and sublicense income payments. We also agreed to pay TranXenoGen sublicense income of 10% or 50% of sublicense income received by us; the amount of sublicense income payable to TranXenoGen in a particular instance will depend on the nature of the sublicense income. We also agreed to pay TranXenoGen a milestone payment of \$100,000 if TranXenoGen obtains certain patent claims in a U.S. issued patent.

The license granted in the agreement continues in force until the expiration of all patent rights. The agreement may be terminated by either party in the event of an uncured breach, and the agreement may also be terminated by us at any time by giving 90 days prior written notice to TranXenoGen. We may also terminate the agreement if the agreement between TranXenoGen and Brandeis University is terminated.

Start Licensing License. On August 30, 2006, we entered into a Settlement and License Agreement with UMass and Start Licensing, Inc. Pursuant to this agreement Start Licensing licenses to us, on a nonexclusive, royalty-free and paid-up basis, certain patent rights for use with non-human animal research or studies, including preclinical trials, in connection with the research, development and sale of therapeutic and diagnostic human cell products.

#### **Exclusive Licenses of Intellectual Property by Us**

The following summarizes licenses from us to third parties.

*GTC License.* On June 8, 1999, we entered into an exclusive development and license agreement with GTC Biotherapeutics. See description of this agreement above.

Exeter Life Sciences License. On October 22, 2003, we entered into an exclusive license with Exeter Life Sciences, Inc., pursuant to which we exclusively licensed to Exeter certain technology and patent rights for use in the fields of agriculture, endangered species, companion animals and equine animals. The license also grants Exeter a right of first negotiation to any improvement patents that are obtained by us that relate to the licensed intellectual property or which are useful, necessary or required to develop or manufacture certain animals, cells or tissues within the defined fields of use.

Under the agreement, we license rights to certain patent rights and technology useful for the fields of use of non-human animals for agriculture, endangered animals and companion animals; excluding production of such animals for the primary purpose of producing human and non-human animal therapeutics and human healthcare products, including without limitation the production of

biopharmaceutical agents in milk, such as proteins, peptides and polypeptides for pharmaceutical, neutraceutical or other use, and excluding the production of immunoglobulin in the blood of *Bos taurus* and *Bos indicus*. The field includes:

- the cloning, development, manufacture and sale of cloned non-human animals, including without limitation, bovine, hircine, ovine, porcine, equine animals and ungulates (as well as any transgenic variance or enhancements thereto) or products that are composed of, made in or derived, extracted or isolated from cells or tissues of such animals for the production of food or fiber, and the rendering of services or uses that relate to the production of such products;
- the cloning, development, manufacture and sale of endangered species for purposes of researching, aiding, reproducing or assisting in the reproduction of such endangered species;
- the cloning, development, and sale of hircine, ovine, feline, canine and equine animals (as well as any transgenic variance or enhancements thereto) for personal, business or commercial purposes, specifically excluding the sale of these animals as scientific research laboratory subjects; and
- the cloning, development, manufacture and sale of cloned equine animals (as well as any transgenic variance or enhancements thereto) or products that are composed of, made in or derived, extracted or isolated from cells or tissues of such animals for non-therapeutic purposes, including but not limited to, for use in agriculture, for use as food, for use as companion, service, work or recreational animals, or for use as racing or other equine event animals, and the rendering of services or uses that relate to the production of such products.

In consideration of the rights and licenses granted to Exeter, Exeter paid to us an initial license fee of \$1,000,000, and has agreed to pay royalties equal to 5% of the net sales of all products and services covered by the license; provided that, sublicense income for license products that are the progeny of cloned animals covered by the license or products obtained from such progeny, the royalty is 3%. Exeter is required to pay an annual maintenance fee for the license, equal to \$100,000 in 2005, increasing annually by \$50,000 up to \$500,000. Exeter s obligation to pay the annual maintenance fee is suspended unless and until certain intellectual property that is the subject of litigation, namely the matter styled *University of Massachusetts v. James M. Robl and Phillipe Collas*, Massachusetts Superior Court, Suffolk County, Docket No. 04-0445-BLS, is recovered and licensed to us and included in the license to Exeter. The license also provides that we will refund certain amounts to Exeter if certain conditions concerning the referenced litigation are not met and that we will extend to Exeter rights associated with improvement patents that are obtained by us or the University in connection with the referenced litigation or any patent interference or opposition proceedings involving us that relate to the licensed intellectual property or which are useful, necessary or required to develop or manufacture cloned and/or transgenic non-human animals and cloned and/or transgenic cells and tissues from non-human animals within the field of use. The license grants Exeter a right of first negotiation to any improvement patents. There are no milestone payments. Exeter agrees to pay us a total of 25% of all sublicense income under the license. Either party may terminate the agreement in the event of an uncured breach. Exeter may terminate without cause on 60 days prior written notice to us, or may terminate immediately in the event of a change in law that materially affects Exeter s ability to commercialize the licensed i

We expect that the Exeter Life Science License will be amended as a result of the Start Settlement and the settlement of the University of Massachusetts and Advanced Cell Technology, Inc. v. Roslin Institute (Edinburgh), Geron Corporation and Exeter Life Sciences, Inc., U.S. District Court for the District of Columbia (Case No. 1:05-cv-00706 RMU), and University of Massachusetts and Advanced Cell Technology, Inc. v. Roslin Institute (Edinburgh), Geron Corporation and Exeter Life Sciences, Inc., U.S. District Court for the District of Columbia (Case No. 1:05-cv-00353 RMU).

Lifeline License. On May 14, 2004, we entered into three license agreements with Lifeline Cell Technology, formerly known as PacGen Cellco, LLC; the licenses were subsequently amended in August 2005. Pursuant to the license agreements, as amended, we licensed to Lifeline, on an exclusive or non-exclusive basis, as applicable, certain know-how and patent rights for, among other things, the research, development, manufacture and sale of human cells for cell therapy in the treatment of human diabetes and liver diseases, and retinal diseases and retinal degenerative diseases. The license agreements requires milestone payments up to \$1.75 million in the aggregate. The agreement requires Lifeline to meet minimum research and development requirements. The licenses continue until expiration of the last valid claim within the licensed patent rights. Either party may terminate the agreements for an uncured breach, and Lifeline may terminate the agreement at any time with 30 days notice.

We expect that Lifeline Exclusive License Agreement Number 2, as amended, will be further amended as a result of the Start Settlement and the settlement of *University of Massachusetts and Advanced Cell Technology, Inc. v. Roslin Institute (Edinburgh), Geron Corporation and Exeter Life Sciences, Inc.*, U.S. District Court for the District of Columbia (Case No. 1:05-cv-00706 RMU), and *University of Massachusetts and Advanced Cell Technology, Inc. v. Roslin Institute (Edinburgh), Geron Corporation and Exeter Life Sciences, Inc.*, U.S. District Court for the District of Columbia (Case No. 1:05-cv-00353 RMU).

Exclusive License Agreement Number 1, as amended, covers patent rights and technology developed by us that are relevant to:

- the research, development, manufacture and sale of human and non-human animal cells for commercial research and
- the manufacture and selling of human cells for therapeutic and diagnostic use in the treatment of human diabetes and liver diseases, and retinal diseases and retinal degenerative diseases.

Lifeline has agreed to pay us royalties ranging from 3% to 10% on net sales of products and services covered by the license, and a minimum royalty fee of \$175,000 in the first year, plus, commencing 12 months after the effective date of the agreement, additional minimum royalty fees in the amount of \$15,000 at 12 months, \$37,500 at 24 months, \$60,625 at 36 months, and \$75,000 annually thereafter. Lifeline also agreed to pay a license fee in the amount of \$225,000 in the form of a Convertible Promissory Note due and payable June 1, 2007, which may be repaid in cash or stock at our election.

Exclusive License Agreement Number 2, as amended, covers patent rights and technology developed by UMass relevant to:

- the research, development, manufacture and sale of human and non-human animal cells and defined animal cell lines for commercial research,
- the manufacture and selling of human cells for therapeutic and diagnostic use in the treatment of human diabetes and liver diseases and retinal diseases and retinal degenerative diseases, and
- the use of defined animal cell lines in the process of manufacturing and selling human cells for therapeutic and diagnostic use in the treatment of human diabetes and liver diseases.

Lifeline is required to pay us royalties ranging from 3% to 12% on net sales of products and services covered by the license, and a minimum royalty fee of \$100,000 in the first year, plus, commencing 12 months after the effective date of the agreement, additional minimum royalty fees in the amount of \$15,000 at 12 months, \$30,000 at 24 months, \$45,000 at 36 months, and \$60,000 annually thereafter. Lifeline also agreed to pay a license fee in the amount of \$150,000 in the form of a Convertible Promissory Note due and payable June 1, 2007, which may be repaid in cash or stock at our election.

We expect that Lifeline Exclusive License Agreement Number 2, as amended, will be further amended as a result of the Start Settlement and the settlement of *University of Massachusetts and Advanced Cell Technology, Inc. v. Roslin Institute (Edinburgh), Geron Corporation and Exeter Life Sciences, Inc.*, U.S. District Court for the District of Columbia (Case No. 1:05-cv-00706 RMU), and *University of Massachusetts and Advanced Cell Technology, Inc. v. Roslin Institute (Edinburgh), Geron Corporation and Exeter Life Sciences, Inc.*, U.S. District Court for the District of Columbia (Case No. 1:05-cv-00353 RMU).

Exclusive License Agreement Number 3, as amended, covers patent rights and technology developed by Infigen relevant to the research, development, manufacture and sale of human cells for cell therapy in the treatment of therapeutic and diagnostic use in the treatment of human diabetes and liver diseases, and retinal diseases and retinal degenerative diseases. Lifeline is required to pay us royalties equal to 6% of net sales of products and services covered by the license, and a minimum royalty fee of \$25,000 in the first year, plus, commencing 12 months after the effective date of the agreement, additional minimum royalty fees in the amount of \$7,500 at 12 months, \$7,500 at 24 months, \$6,875 at 36 months, and \$15,000 annually thereafter. Lifeline also agreed to pay a license fee in the amount of \$225,000 in the form of a convertible promissory note due and payable June 1, 2007, which may be repaid in cash or stock at our election.

Start Licensing License. On August 30, 2006, we entered into a Settlement and License Agreement with UMass and Start Licensing, Inc. See description of this agreement above. Pursuant to this agreement, we granted Start Licensing a worldwide, exclusive, fully paid-up and royalty-free license, with the right to grant sublicenses, to certain patent rights for use in connection with all uses and applications in non-human animals. The agreement was reached in connection with the settlement of the patent interference actions described in Item 8 of our Quarterly Report on Form 10-QSB filed on August 11, 2006 (Geron-Related Proceedings). The terms of the agreement also includes an initial payment to us, which has been made, and certain milestone payments. In addition, under the agreement, Start, Geron Corporation and Roslin Institute (Roslin) each agree not to sue us under certain patent applications owned by Roslin.

#### Nonexclusive Licenses of Intellectual Property by Us

We have entered into numerous nonexclusive license agreements pursuant to which we have granted non-exclusive rights to various parties to use certain patent rights in defined fields. These licenses generally provide for commercialization of our intellectual property and typically contain minimum royalties, milestones and continuing royalties based upon percentages of revenue.

California Proposition 71. In November 2004, California State Proposition 71, referred to as Prop. 71, the California Stem Cell Research and Cures Initiative, was adopted by state-wide referendum. Prop. 71 provides for a state-sponsored program designed to encourage stem cell research in the State of California, and to finance such research with State funds totaling approximately \$295 million annually for 10 years beginning in 2005. This initiative creates the California Institute for Regenerative Medicine, which will provide grants, primarily but not exclusively, to academic institutions to advance both ES cell research and adult stem cell research. The implementation of Prop. 71 is being challenged in several lawsuits filed in 2005. ES cell research is one of our primary areas of focus. It is unclear whether we are eligible to directly receive Prop. 71 generated funds. However, we intend to apply for any funding that becomes available. We also expect to benefit from collaborations with academic and other institutions eligible for Prop. 71 funding for research in the use of ES cells for various diseases and conditions. ES cell research does not generally qualify for federal funding due to restrictions on embryonic stem cell research. Prop. 71 is specifically targeting research in the embryonic stem cell field. We consider government support to be important confirmation of the quality of our technology, but do not rely on government programs as a significant source of financial support.

Competition. The biotechnology industries are characterized by rapidly evolving technology and intense competition. Our competitors include major multinational pharmaceutical companies, specialty biotechnology companies and chemical and medical products companies operating in the fields of regenerative medicine, cell therapy, tissue engineering and tissue regeneration. Many of these companies are well-established and possess technical, research and development, financial and sales and marketing resources significantly greater than ours. In addition, certain smaller biotech companies have formed strategic collaborations, partnerships and other types of joint ventures with larger, well established industry competitors that afford these companies potential research and development and commercialization advantages. Academic institutions, governmental agencies and other public and private research organizations are also conducting and financing research activities which may produce products directly competitive to those we are developing. Moreover, many of these competitors may be able to obtain patent protection, obtain FDA and other regulatory approvals and begin commercial sales of their products before we do.

In the general area of cell-based therapies, we compete with a variety of companies, most of whom are specialty biotechnology companies. Some of these, such as Geron Corporation, Genzyme Corporation, StemCells, Inc., Aastrom Biosciences, Inc. and Viacell, Inc., are well-established and have substantial technical and financial resources compared to us. However, as cell-based products are only just emerging as medical therapies, many of our direct competitors are smaller biotechnology and specialty medical products companies. These smaller companies may become significant competitors through rapid evolution of new technologies. Any of these companies could substantially strengthen their competitive position through strategic alliances or collaborative arrangements with large pharmaceutical or biotechnology companies.

The diseases and medical conditions we are targeting have no effective long-term therapies. Nevertheless, we expect that our technologies and products will compete with a variety of therapeutic products and procedures offered by major pharmaceutical companies. Many pharmaceutical and biotechnology companies are investigating new drugs and therapeutic approaches for the same purposes, which may achieve new efficacy profiles, extend the therapeutic window for such products, alter the prognosis of these diseases, or prevent their onset. We believe that our products, when and if successfully developed, will compete with these products principally on the basis of improved and extended efficacy and safety and their overall economic benefit to the health care system.

Competition for any stem cell products that we may develop may be in the form of existing and new drugs, other forms of cell transplantation, ablative and simulative procedures, and gene therapy. We believe that some of our competitors are also trying to develop stem and progenitor cell-based technologies. We expect that all of these products will compete with our potential stem cell products based on efficacy, safety, cost and intellectual property positions. We may also face competition from companies that have filed patent applications relating to the use of genetically modified cells to treat disease, disorder or injury. In the event our therapies should require the use of such genetically modified cells, we may be required to seek licenses from these competitors in order to commercialize certain of our proposed products, and such licenses may not be granted.

If we develop products that receive regulatory approval, they would then have to compete for market acceptance and market share. For certain of our potential products, an important success factor will be the timing of market introduction of competitive products. This timing will be a function of the relative speed with which we and our competitors can develop products, complete the clinical testing and approval processes, and supply commercial quantities of a product to market. These competitive products may also impact the timing of clinical testing and approval processes by limiting the number of clinical investigators and patients available to test our potential products.

Government Regulation. Regulation by governmental authorities in the United States and other countries is a significant factor in our research and development and will be a significant factor in the manufacture and marketing of our proposed products. The nature and extent to which such regulation applies to us will vary depending on the nature of any products we may develop. We anticipate that many, if not all, of our products will require regulatory approval by governmental agencies prior to commercialization. In particular, human therapeutic products are subject to rigorous preclinical and clinical testing and other approval procedures of the U.S. Food and Drug Administration, referred to as the FDA, and similar regulatory authorities in European and other countries. Various governmental statutes and regulations also govern or influence testing, manufacturing, safety, labeling, storage and recordkeeping related to such products and their marketing. The process of obtaining these approvals and the subsequent compliance with appropriate statutes and regulations require the expenditure of substantial time and money, and there can be no guarantee that approvals will be granted.

*FDA Approval.* The FDA requirements for our potential products to be marketed in the United States include the following five steps:

Preclinical laboratory and animal tests must be conducted. Preclinical tests include laboratory evaluation of the cells and the formulation intended for use in humans for quality and consistency. In vivo studies are performed in normal animals and specific disease models to assess the potential safety and efficacy of the cell therapy product.

An investigational new drug application, or IND, must be submitted to the FDA, and the IND must become effective before human clinical trials in the United States may commence. The IND is submitted to the FDA with the preclinical data, a proposed development plan and a proposed protocol for a study in humans. The IND becomes effective 30 days following receipt by the FDA, provided there are no questions, requests for delay or objections from the FDA. If the FDA has questions or concerns, it notifies the sponsor, and the IND will then be on clinical hold until a satisfactory response is made by the sponsor.

Adequate and well-controlled human clinical trials must be conducted to establish the safety and efficacy of the product. Clinical trials involve the evaluation of a potential product under the supervision of a qualified physician, in accordance with a protocol that details the objectives of the study, the parameters to be used to monitor safety and the efficacy criteria to be evaluated. Each protocol is submitted to the FDA as part of the IND. The protocol for each clinical study must be approved by an independent institutional review board, or IRB, of the institution at which the study is conducted, and the informed consent of all participants must be obtained. The IRB reviews the existing information on the product, considers ethical factors, the safety of human subjects, the potential benefits of the therapy and the possible liability of the institution. The IRB is responsible for ongoing safety assessment of the subjects during the clinical investigation. Clinical development is traditionally conducted in three sequential phases.

- Phase 1 studies for a cell therapy product are designed to evaluate safety in a small number of subjects in a selected patient population by assessing adverse effects, and may include multiple dose levels. This study may also gather preliminary evidence of a beneficial effect on the disease.
- Phase 2 may involve studies in a limited patient population to determine biological and clinical effects of the product and to identify possible adverse effects and safety risks of the product in the selected patient population.
- Phase 3 trials would be undertaken to conclusively demonstrate clinical benefit or effect and to test further for safety within a broader patient population, generally at multiple study sites. The FDA continually reviews the clinical trial plans and results and may suggest changes or may require discontinuance of the trials at any time if significant safety issues arise.

Marketing authorization applications must be submitted to the FDA. The results of the preclinical studies and clinical studies are submitted to the FDA in the form of marketing approval authorization applications.

The FDA must approve the applications prior to any commercial sale or practice of the technology or product. Biologic product manufacturing establishments located in certain states also may be subject to separate regulatory and licensing requirements. The testing and approval process will require substantial time, effort and expense. The time for approval is affected by a number of factors, including relative risks and benefits demonstrated in clinical trials, the availability of alternative treatments and the severity of the disease. Additional animal studies or clinical trials that may be requested during the FDA review period.

Our research and development is based largely on the use of human stem and progenitor cells. The FDA has initiated a risk-based approach to regulating human cell, tissue and cellular and tissue-based products and has published current Good Tissue Practice regulations. As part of this approach, the FDA has published final rules for registration of establishments that engage in the recovery, screening, testing, processing, storage or distribution of human cells, tissues, and cellular and tissue-based products, and for the listing of such products. In addition, the FDA has published rules for making suitability and eligibility determinations for donors of cells and tissue and for current good tissue practice for manufacturers using them, which have recently taken effect. We cannot now determine the full effects of this regulatory initiative, including precisely how it may affect the clarity of regulatory obligations and the extent of regulatory burdens associated with our stem cell research and the manufacture and marketing of stem cell products.

European and Other Regulatory Approval. Approval of a product by regulatory authorities comparable to the FDA in Europe and other countries will likely be necessary prior to commencement of marketing a product in any of these countries. The regulatory authorities in each country may impose their own requirements and may refuse to grant approval, or may require additional data before granting approval, even though the relevant product has been approved by the FDA or another authority. The regulatory authorities in the European Union, or EU, and other developed countries have lengthy approval processes for pharmaceutical products. The process for gaining approval in particular countries varies, but is generally similar to the FDA approval process. In Europe, the European Committee for Proprietary Medicinal Products provides a mechanism for EU-member states to exchange information on all aspects of product licensing. The EU has established a European agency for the evaluation of medical products, with both a centralized community procedure and a decentralized procedure, the latter being based on the principle of licensing within one member country followed by mutual recognition by the other member countries.

*Other Regulations*. In addition to safety regulations enforced by the FDA, we are also subject to regulations under the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act and other present and potential future and federal, state, local, and foreign regulations.

Outside the United States, we will be subject to regulations that govern the import of drug products from the United States or other manufacturing sites and foreign regulatory requirements governing human clinical trials and marketing approval for our products. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursements vary widely from country to country.

The United States Congress, several states and foreign countries have considered legislation banning or restricting human application of ES cell-based and nuclear transfer based technologies. No assurance can be given regarding future restrictions or prohibitions that might affect our technology and business. In addition, we cannot assure you that future judicial rulings with respect to nuclear transfer technology or human ES cells will not have the effect of delaying, limiting or preventing the use of nuclear transfer technology or ES cell-based technology or delaying, limiting or preventing the sale, manufacture or use of

products or services derived from nuclear transfer technology or ES cell-derived material. Any such legislative or judicial development would harm our ability to generate revenues and operate profitably.

For additional information about governmental regulations that will affect our planned and intended business operations, see RISK FACTORS beginning on page 6 above.

*Employees.* As of March 28, 2007, we had forty-one full-time employees, of whom ten hold Ph.D. or M.D. degrees. Thirty-four employees are directly involved in research and development activities and nine are engaged in business development and administration. We also use the services of numerous outside consultants in business and scientific matters. We believe that we have good relations with our employees and consultants.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS AND PLAN OF OPERATION

#### **OVERVIEW**

This prospectus contains forward-looking statements that involve risks and uncertainties. We use words such as may, assumes. forecasts. positions, predicts, strategy, will, expects, estimates, anticipates, believes, projects, intends, plans, budgets, potential, thereof, and other statements contained in quarterly report, and the exhibits hereto, regarding matters that are not historical facts and are forward-looking statements. Because these statements involve risks and uncertainties, as well as certain assumptions, actual results may differ materially from those expressed or implied by such forward-looking statements. Factors that could cause actual results to differ materially include, but are not limited to risks inherent in: our early stage of development, including a lack of operating history, lack of profitable operations and the need for additional capital; the development and commercialization of largely novel and unproven technologies and products; our ability to protect, maintain, and defend our intellectual property rights: uncertainties regarding our ability to obtain the capital resources needed to continue research and development operations and to conduct research, preclinical development and clinical trials necessary for regulatory approvals; uncertainty regarding the outcome of clinical trials and our overall ability to compete effectively in a highly complex, rapidly developing, capital intensive and competitive industry. See RISK FACTORS set forth on page 6 of this prospectus for a more complete discussion of these factors. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date that they are made. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

The following discussion should be read in conjunction with the consolidated financial statements and notes thereto included herein.

We are a biotechnology company focused on developing and commercializing human stem cell technology in the emerging fields of regenerative medicine and stem cell therapy.

#### SIGNIFICANT ACCOUNTING POLICIES

Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Note 2 of the Notes to Consolidated Financial Statements describes the significant accounting policies used in the preparation of the consolidated financial statements. Certain of these significant accounting policies are considered to be critical accounting policies, as defined below. During the year ended December 31, 2006 we adopted FAS Statement No. 123(R) Share-Based Payment, more fully described below under Stock-based compensation and FAS 155 Accounting for Certain Hybrid Financial Instruments . We applied the accounting proscribed in FAS 155 to account for the 2006 Convertible Debentures described in Note 5 Convertible Debentures 2006. Other than the adoption of these standards, we did not make any significant changes to our accounting policies during the year ended December 31, 2006, as compared to those policies disclosed in the December 31, 2005 consolidated financial statements filed in our Current Report on Form 10-K with the SEC on March 31, 2006.

A critical accounting policy is defined as one that is both material to the presentation of our financial statements and requires management to make difficult, subjective or complex judgments that could have a material effect on our financial condition and results of operations. Specifically, critical accounting estimates have the following attributes: 1) we are required to make assumptions about matters that are highly uncertain at the time of the estimate; and 2) different estimates we could reasonably have used, or changes in the estimate that are reasonably likely to occur, would have a material effect on our financial condition or results of operations.

Estimates and assumptions about future events and their effects cannot be determined with certainty. We base our estimates on historical experience and on various other assumptions believed to be applicable and reasonable under the circumstances. These estimates may change as new events occur, as additional information is obtained and as our operating environment changes. These changes have historically been minor and have been included in the consolidated financial statements as soon as they became known. Based on a critical assessment of our accounting policies and the underlying judgments and uncertainties affecting the application of those policies, management believes that our consolidated financial statements are fairly stated in accordance with accounting principles generally accepted in the United States, and present a meaningful presentation of our financial condition and results of operations. We believe the following critical accounting policies reflect our more significant estimates and assumptions used in the preparation of our consolidated financial statements:

*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, our management has estimated variables used to calculate the Black Scholes and binomial lattice model calculations used to value derivative instruments discussed below under Valuation of Derivative Instruments . In addition, management has estimated the expected economic life and value of our licensed technology, our net operating loss for tax purposes, share-based payments to compensation to employees, directors, consultants and investment banks, the useful lives of our fixed assets and our allowance for bad debts. Actual results could differ from those estimates.

*Fair Value of Financial Instruments* For certain of our financial instruments, including accounts receivable, accounts payable, accrued expenses, interest payable, bank overdraft, advances payable and notes payable, the carrying amounts approximate fair value due to their relatively short maturities.

Valuation of Derivative Instruments 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. We applied the accounting proscribed in FAS 155 to account for the 2006 Convertible Debentures described below in Note 5 Convertible Debentures 2006. In determining the appropriate fair value, the Company uses a variety of valuation techniques including Black Scholes models, Binomial Option Pricing models, Standard Put Option Binomial models and net present value of certain penalty amounts. 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 derivatives are valued using Black Scholes models.

Cash and Cash Equivalents Cash equivalents are comprised of certain highly liquid investments with maturity of three months or less when purchased. We maintain our cash in bank deposit accounts, which at times, may exceed federally insured limits. We have not experienced any losses in such account.

*Equipment* We record our equipment at historical cost. We expense maintenance and repairs as incurred. Depreciation is provided for by the straight-line method over three to six years. 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.

**Revenue Recognition** Our 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 and the estimated economic life of the patents related to the license. 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 as a reduction of research and development expense once the reimbursements are approved and the Company is assured of collectibility.

Intangible and Long-Lived Assets We follow 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 period ended December 31, 2006 no impairment losses were recognized.

Research and Development Costs Research and development costs consist of expenditures for the research and development of patents and technology, which are not capitalizable. Our 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.

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.

*Stock Based Compensation* At December 31, 2006, we had two stock-based employee compensation plans, which are described more fully in Note 11 Options Outstanding.

Prior to the January 1, 2006 adoption of the FAS No. 123(R), Share-Based Payment, the Company accounted for stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board (APB) Opinion No. 25, Accounting for Stock Issued to Employees, and related interpretations. Because the stock option grant price equaled the market price on the date of grant, no compensation expense was recognized by the Company for stock-based compensation. As permitted by SFAS No. 123, Accounting for Stock-Based Compensation (SFAS 123) stock-based compensation was included as a pro forma disclosure in the notes to the consolidated financial statements.

Effective January 1, 2006, the Company adopted the fair value recognition provisions of SFAS 123R, using the modified prospective transition method. Under this transition method, stock-based compensation expense is recognized in the consolidated financial statements for granted, modified or settled stock options. Results for prior periods have not been restated, as provided for under the modified prospective method.

Prior to the adoption of SFAS 123R, the Company presented all tax benefits resulting from the exercise of stock options as operating cash inflows in the consolidated statements of cash flows, in accordance with the provisions of the Emerging Issues Task Force (EITF) Issue No. 00-15, Classification in the Statement of Cash Flows of the Income Tax Benefit Received by a Company upon Exercise of a Nonqualified Employee Stock Option. SFAS 123R requires the benefits of tax deductions in excess of the compensation cost recognized for those options to be classified as financing cash inflows rather than operating cash inflows, on a prospective basis. The impact of this change was not material to the Company.

#### RESULTS OF OPERATIONS

#### Revenues

Revenues for the twelve months ended December 31, 2006 and December 31, 2005 were approximately \$441,000 and \$395,000 rsespectively. These amounts relate primarily to license fees and royalties collected that are being amortized over the period of the license granted. The increase in revenue in the current period was due to increased revenue from new licenses issued in the period.

#### Research and Development Expenses and Grant Reimbursements

Research and development expenses for the twelve months ended December 31, 2006 and 2005 were approximately \$9,027,000 and \$2,606,000, respectively. During the twelve months ended December 31, 2006, the Company has significantly increased scientific research and has allocated a much greater portion of expenditure and focus on research and development activity than had previously been the case. Additional expenditure in this area includes scientific payroll and payroll related expenses, facilities costs and scientific supplies as well as investment in the infrastructure needed to support this greater scientific activity.

Our research and development expenses consist primarily of costs associated with basic and pre-clinical research exclusively in the field of human stem cell therapies and regenerative medicine, with focus on development of our technologies in cellular reprogramming, reduced complexity applications, and stem cell differentiation. These expenses represent both pre-clinical development costs and costs associated with non-clinical support activities such as quality control and regulatory processes. The cost of our research and development personnel is the most significant category of expense; however, we also incur expenses with third parties, including license agreements, sponsored research programs and consulting expenses.

We do not segregate research and development costs by project because our research is focused exclusively on human stem cell therapies as a unitary field of study. Although we have three principal areas of focus for our research, these areas are completely intertwined and have not yet matured to the point where they are separate and distinct projects. The intellectual property, scientists and other resources dedicated to these efforts are not separately allocated to individual projects, but rather are conducting our research on an integrated basis.

We expect that research and development expenses will continue to increase in the foreseeable future as we add personnel, expand our pre-clinical research, begin clinical trial activities, and increase our regulatory compliance capabilities. The amount of these increases is difficult to predict due to the uncertainty inherent in the timing and extent of progress in our research programs, and initiation of clinical trials. In addition, the results from our basic research and pre-clinical trials, as well as the results of trials of similar therapeutics under development by others, will influence the number, size and duration of planned and unplanned trials. As our research efforts mature, we will continue to review the direction of our research based on an assessment of the value of possible commercial applications emerging from these efforts. Based on this continuing review, we expect to establish discrete research programs and evaluate the cost and potential for cash inflows from commercializing products, partnering with others in the biotechnology or pharmaceutical industry, or licensing the technologies associated with these programs to third parties.

We believe that it is not possible at this stage to provide a meaningful estimate of the total cost to complete our ongoing projects and bring any proposed products to market. The use of human embryonic stem cells as a therapy is an emerging area of medicine, and it is not known what clinical trials will be required by the FDA in order to gain marketing approval. Costs to complete could vary substantially depending upon the projects selected for development, the number of clinical trials required and the

number of patients needed for each study. It is possible that the completion of these studies could be delayed for a variety of reasons, including difficulties in enrolling patients, delays in manufacturing, incomplete or inconsistent data from the pre-clinical or clinical trials, and difficulties evaluating the trial results. Any delay in completion of a trial would increase the cost of that trial, which would harm our results of operations. Due to these uncertainties, we cannot reasonably estimate the size, nature nor timing of the costs to complete, or the amount or timing of the net cash inflows from our current activities. Until we obtain further relevant pre-clinical and clinical data, we will not be able to estimate our future expenses related to these programs or when, if ever, and to what extent we will receive cash inflows from resulting products.

Grant reimbursements for the twelve months ended December 31, 2006 and 2005 were approximately \$369,000 and \$742,000, respectively. These amounts represent approved reimbursements pursuant the grant from the National Institutes of Science and Technology. This grant expired in May 2006.

### **General and Administrative Expenses**

General and administrative expenses for the twelve months ended December 31, 2006 and December 31, 2005 were approximately \$9,152,000 and \$9,304,000, respectively. The level of spending on general and administrative expenses has remained consistent during the periods as we seek to hold these costs at current levels whilst increasing spending on research and development.

#### Other Income / (Expense)

Other income/ (expense) for the twelve months ended December 31, 2006 and December 31, 2005 were approximately (\$1,037,000) and \$1,562,000, respectively. The increase in other expense in the twelve months ended December 31, 2006, compared to other income in the prior periods, relates primarily to increased Interest Expense, which relates primarily to the amortization of discounts on Convertible Debentures and embedded derivatives and to charges related to issuance of Convertible Debentures and repricing and issuance of warrants. This is partially offset by the increased adjustments to the fair value of derivatives during the period.

#### **Net Loss**

Net loss for the twelve months ended December 31, 2006 and December 31, 2005 was approximately \$18,720,000 and \$9,394,000, respectively. The increased loss in the current periods is the result of increased research and development expenses, and to the increase in other expenses.

#### Recent Accounting Pronouncements

On February 15, 2007, the Financial Accounting Standards Board, or FASB, issued FAS No. 159, The Fair Value Option for Financial Assets and Liabilities Including an Amendment of FAS 115. This standard permits an entity to choose to measure many financial instruments and certain other items at fair value. This option is available to all entities. Most of the provisions in FAS 159 are elective; however, an amendment to FAS 115 Accounting for Certain Investments in Debt and Equity Securities applies to all entities with available for sale or trading securities. Some requirements apply differently to entities that do not report net income. FAS 159 is effective as of the beginning of an entities first fiscal year that begins after November 15, 2007. Early adoption is permitted as of the beginning of the previous fiscal year provided that the entity makes that choice in the first 120 days of that fiscal year and also elects to apply the provisions of FAS 157 Fair Value Measurements. We will adopt FAS 159 beginning January 1, 2008 and we are currently evaluating the potential impact the adoption of this pronouncement will have on our financial statements.

In December 2006, the FASB posted FASB Staff Position, or FSP, 00-9-2, Accounting for Registration Payment Arrangements. This FSP specifies that the contingent obligation to make future payments or otherwise transfer consideration under a registration payment arrangement, whether issued as a separate agreement or included as a provision of a financial instrument or other agreement should be separately recognized and measured in accordance with FAS No. 5, Accounting for Contingencies. This FSP further clarifies that a financial instrument subject to a registration payment arrangement should be accounted for in accordance with other applicable GAAP without regard to the contingent obligation to transfer consideration pursuant to the registration payment arrangement. This FSP is effective immediately for registration payment arrangements and financial instruments subject to those arrangements that were entered into or modified subsequent to December 15, 2006. For registration payment arrangements and financial instruments subject to those arrangements that were entered into prior to December 15, 2006, the FSP is effective for fiscal years beginning after December 15, 2006, and interim periods within those fiscal years. We will adopt FSP 00-19-2 beginning January 1, 2008 and we are currently evaluating the potential impact the adoption of this pronouncement will have on our financial statements.

In September 2006, the Financial Accounting Standards Board, or FASB, issued FAS No. 157, *Fair Value Measurements*, or FAS 157, which provides guidance on how to measure assets and liabilities that use fair value. This Statement clarifies the principle that fair value should be based on the assumptions market participants would use when pricing an asset or liability and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. FAS 157 will apply whenever another generally accepted accounting principle requires, or permits, assets or liabilities to be measure at fair value but does not expand the use of fair value to any new circumstances. This statement will also require additional disclosures in both annual and quarterly reports. FAS 157 is effective for fiscal years beginning after November 2007, and will be adopted by us beginning January 1, 2008. We are currently evaluating the potential impact this statement may have on our financial statements, but do not believe the impact of adoption will be material.

In September 2006, the SEC staff issued Staff Accounting Bulletin, or SAB, No. 108, Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements, or SAB 108. SAB 108 provides guidance on the consideration of the effects of prior year misstatements in quantifying current year misstatements for the purpose of determining whether the current year's financial statements are materially misstated. SAB 108 is effective for fiscal years ending after November 15, 2006. We will initially apply the provisions of SAB 108 in connection with the preparation of our annual financial statements for the year ending December 31, 2006. We have evaluated the potential impact that SAB 108 may have on our financial statements and do not believe the impact of the application of this guidance will be material.

In September 2006, the FASB issued FAS No. 158, *Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans*, or FAS 158. This Statement requires companies to recognize in their statement of financial position an asset for a plan's overfunded status or a liability for a plan's underfunded status and to measure a plan's assets and its obligations that determine its funded status as of the end of the company's fiscal year. Additionally, FAS 158 requires companies to recognize changes in the funded status of a defined benefit postretirement plan in the year that the changes occur and those changes will be reported in comprehensive income. The provisions of FAS 158 are effective as of the end of fiscal year 2006 and we are currently in the process of quantifying the impact to the financial statements.

In July 2006, the FASB issued Financial Accounting Standards Board Interpretation No. 48, Accounting for Uncertainty in Income Taxes, an Interpretation of FASB Statement No. 09, Accounting for Income Taxes (FIN No. 48). This interpretation creates a single model to address uncertainty in tax positions. FIN 48 clarifies the accounting for income taxes by prescribing the minimum recognition threshold a tax position is required to meet before being recognized in the financial statements. The

interpretation also provides guidance on derecognition, measurement, classification, interest and penalties, accounting in interim periods, disclosure, and transition. FIN 48 is effective for years beginning after December 15, 2006. Management of the Company is evaluating the impact of this pronouncement, but does not anticipate that it will have a significant impact on its financial statements.

In February 2006, the FASB issued FAS No. 155, Accounting for Certain Hybrid Instruments. This standard amends the guidance in FASB Statements No. 133, Accounting for Derivative Instruments and Hedging Activities, and No. 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities. Statement 155 allows financial instruments that have embedded derivatives to be accounted for as a whole (eliminating the need to bifurcate the derivative from its host) if the holder elects to account for the whole instrument on a fair value basis. The Company has adopted FAS 155 and applies it to all relevant financing transactions from the date of adoption.

In September 2005, the EITF reached a consensus on Issue 05-8, Income Tax Consequences of Issuing Convertible Debt with a Beneficial Conversion Feature. EITF Issues No. 98-5, Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios, and No. 00-27, Application of Issue No. 98-5 to Certain Convertible Instruments, provide guidance on how companies should bifurcate convertible debt issued with a beneficial conversion feature into a liability and an equity component. For income tax purposes, such an instrument is only recorded as a liability. A question has been raised as to whether a basis difference results from the issuance of convertible debt with a beneficial conversion feature and, if so, whether the basis difference is a temporary difference. We do not expect the provisions of this consensus to have a material impact on our financial position, results of operations or cash flows.

In September 2005, the EITF discussed Issue 05-4, The Effect of a Liquidated Damages Clause on a Freestanding Instrument Subject to EITF Issue No. 00-19, Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock. The Effect of a Liquidated Damages Clause on a Freestanding Financial Instrument Subject to EITF Issue No. 00-19, Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock. Issuance of a registration rights agreement with a liquidated damages clause is common when equity instruments, stock purchase warrants, and financial instruments that are convertible into equity securities are issued. The agreement requires the issuer to use its best efforts to file a registration statement for the resale of the equity instruments or the shares of stock underlying the stock purchase warrant or convertible financial instrument and have it declared effective by the end of a specified grace period. The issuer may also be required to maintain the effectiveness of the registration statement for a period of time or pay a liquidated damage penalty to the investor each month until the registration statement is declared effective. Given the potential significance of the penalty, a question arises as to the effect, if any, this feature has on the related financial instruments if they are subject to the scope of Issue 00-19. The company took the provisions of this issue into account in their accounting for the period.

In September 2005, the EITF reached a consensus on Issue 05-7, Accounting for Modifications to Conversion Options Embedded in Debt Securities and Related Issues. EITF Issue No. 96-19, Debtor's Accounting for a Modification or Exchange of Debt Instruments, provides guidance on whether modifications of debt result in an extinguishment of that debt. In certain situations, companies may change the terms of a conversion option as part of a debt modification, which may result in the following circumstances: (a) the change in the conversion option's terms causes the fair value of the conversion option to change but does not result in the modification meeting the condition in Issue 96-19 that would require the modification to be accounted for as an extinguishment of debt, and (b) the change in the conversion option's terms did not result in separate accounting for the conversion option under Statement 133. When both of these circumstances exist, questions have arisen regarding whether (a) the modification to the conversion option, which changes its fair value, should affect subsequent interest expense recognition related to the debt and (b) a beneficial conversion feature related to a debt modification

should be recognized by the borrower if the modification increases the intrinsic value of the debt. We do not expect the provisions of this consensus to have a material impact on our financial position, results of operations or cash flows.

In June 2005, the EITF reached a consensus on Issue 05-2, The Meaning of Conventional Convertible Debt Instrument in EITF Issue 00-19. Paragraph 4 of Issue 00-19 states that the requirements of paragraphs 12-32 of this issue do not apply if the hybrid contract is a conventional convertible debt instrument in which the holder may only realize the value of the conversion option by exercising the option and receiving the entire proceeds in a fixed number of shares or the equivalent amount of cash (at the discretion of the issuer). The term conventional convertible debt instrument is not defined in Issue 00-19 and, as a result, questions have arisen regarding when a convertible debt instrument should be considered conventional for purposes of Issue 00-19. A question has also arisen related to whether conventional convertible preferred stock should be treated similar to conventional convertible debt. We do not expect the provisions of this consensus to have a material impact on our financial position, results of operations or cash flows.

In June 2005, the EITF reached a consensus on Issue 05-6, Determining the Amortization Period for Leasehold Improvements, which requires that leasehold improvements acquired in a business combination or purchased subsequent to the inception of a lease be amortized over the lesser of the useful life of the assets or a term that includes renewals that are reasonably assured at the date of the business combination or purchase. EITF 05-6 is effective for periods beginning after July 1, 2005. We do not expect the provisions of this consensus to have a material impact on our financial position, results of operations or cash flows.

In March 2005, the FASB issued FASB Interpretation No. 47, Accounting for Conditional Asset Retirement Obligations (FIN 47). FIN 47 provides guidance relating to the identification of and financial reporting for legal obligations to perform an asset retirement activity. The Interpretation requires recognition of a liability for the fair value of a conditional asset retirement obligation when incurred if the liability's fair value can be reasonably estimated. FIN 47 also defines when an entity would have sufficient information to reasonably estimate the fair value of an asset retirement obligation. The provision is effective no later than the end of fiscal years ending after December 15, 2005. The Company will adopt FIN 47 beginning the first quarter of fiscal year 2006 and does not believe the adoption will have a material impact on its consolidated financial position or results of operations or cash flows.

In May 2005, the FASB issued FAS No. 154, Accounting Changes and Error Corrections a replacement of APB Opinion No. 20 and FAB Statement No. 3. FAS No. 154 requires retrospective application to prior periods' financial statements of changes in accounting principle, unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. FAS No. 154 also requires that retrospective application of a change in accounting principle be limited to the direct effects of the change. Indirect effects of a change in accounting principle, such as a change in nondiscretionary profit-sharing payments resulting from an accounting change, should be recognized in the period of the accounting change. FAS No. 154 also requires that a change in depreciation, amortization or depletion method for long-lived, non-financial assets be accounted for as a change in accounting estimate effected by a change in accounting principle. FAS No. 154 is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005. Early adoption is permitted for accounting changes and corrections of errors made in fiscal years beginning after the date this Statement is issued. Management does not expect the implementation of this new standard to have a material impact on our financial position, results of operations and cash flows.

In March 2005, the SEC released Staff Accounting Bulletin No. 107, Share-Based Payment (SAB 107), which provides interpretive guidance related to the interaction between FAS 123(R) and certain SEC rules and regulations. It also provides the SEC staff's views regarding

valuation of share-based payment arrangements. In April 2005, the SEC amended the compliance dates for FAS 123(R), to allow companies to implement the standard at the beginning of their next fiscal year, instead of the next reporting period beginning after June 15, 2005. Management is currently evaluating the impact SAB 107 will have on our consolidated financial statements.

#### LIQUIDITY AND CAPITAL RESOURCES

We are financing our operations primarily with \$8,750,000 of proceeds of convertible debentures issued in September 2006 and described in our Current Report on Form 8-K filed with the Securities and Exchange Commission and in Note 5, Convertible Debentures 2006, and \$4,314,588 of proceeds from warrant exercises as described above in Note 7 Warrant Derivatives, and \$17,750,000 of proceeds of convertible debentures issued September 15, 2005 and described in our Current Report on Form 8-K filed with the Securities and Exchange Commission on September 19, 2005. To a substantially lesser degree, financing of our operations is provided through grant funding, payments received under license agreements, and interest earned on cash and cash equivalents.

With the exception of 2002, when we sold certain assets of a subsidiary resulting in a gain for the year, we have incurred substantial net losses each year since inception as a result of research and development and general and administrative expenses in support of our operations. We anticipate incurring substantial net losses in the future.

Cash and cash equivalents at December 31, 2006 and December 31, 2005 were approximately \$8,689,000 and \$13,858,000, respectively. The decrease in the current period is primarily the result of cash received in for warrant exercises and in connection with issuance of Convertible debentures, offset by cash utilized in operations, capital expenditures, and costs incurred by the Company for investor relations related expenses in the current period.

Our cash and cash equivalents are limited. We expect to require substantial additional funding. Our future cash requirements will depend on many factors, including the pace and scope of our research and development programs, the costs involved in filing, prosecuting, maintaining and enforcing patents and other costs associated with commercializing our potential products. We intend to seek additional funding primarily through public or private financing transactions, and, to a lesser degree, new licensing or scientific collaborations, grants from governmental or other institutions, and other related transactions. If we are unable to raise additional funds, we will be forced to either scale back our business efforts or curtail our business activities entirely. We anticipate that our available cash and expected income will be sufficient to finance most of our current activities for at least twelve months from the date of the financial statements, although certain of these activities and related personnel may need to be reduced. We cannot assure you that public or private financing or grants will be available on acceptable terms, if at all. Several factors will affect our ability to raise additional funding, including, but not limited to, the volatility of our Common Stock.

#### **PROPERTIES**

Our headquarters are located at 1201 Harbor Bay Parkway, Alameda, California 94502. Our facilities consist of approximately 15,250 square feet of laboratory and office space. Our sublease for the California facility expires on May 31, 2008. We also lease approximately 14,000 square foot of office and laboratory facilities at 381 Plantation Street in Worcester, MA, which, together with the California facility, provides us the capability of producing necessary quantities of materials sufficient to support our research. We have the Worcester facility under an eight year sub-lease which expires on April 30, 2010. In addition, we lease approximately 3,000 square feet of corporate office space at 11100 Santa Monica Boulevard in Los Angeles, CA 90025. We do not own any real estate.

#### CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Except as described below, none of the following parties has, since our date of incorporation, had any material interest, direct or indirect, in any transaction with us or in any presently proposed transaction that has or will materially affect us, other than as noted in this section:

- Any of our directors or officers,
- Any person proposed as a nominee for election as a director,
- Any person who beneficially owns, directly or indirectly, shares carrying more than 5% of the voting rights attached to our outstanding shares of common stock,
- Any of our promoters, and
- Any relative or spouse of any of the foregoing persons who has the same house as such person.

Transactions with ACT Group

On July 12, 2002, we issued a promissory note with a face amount of \$1,000,000, referred to as the Group Note, to our majority stockholder, ACT Group, as a repayment of advances received from ACT Group. The Group Note was extinguished in full in connection with the execution of the Aronson settlement agreement. As a condition to our entering into the Aronson settlement agreement, we entered into an agreement with ACT Group, referred to as the Group Agreement, compensating us for the obligations we incurred under the Aronson settlement agreement, which extinguished in full ACT Group s obligations and indebtedness to the plaintiffs in the Aronson matter, and resolving certain disputes with respect to amounts due to and from us and ACT Group.

Pursuant to the Group Agreement, in consideration for our entering into the Aronson settlement agreement, the following was agreed to by ACT Group and us:

- ACT Group would extinguish our liability to ACT Group relating to the Group Note,
- We would extinguish an existing intercompany debt owed to us by ACT Group of \$782,295, and
- ACT Group agreed to transfer to us 352,153 shares of our common stock to compensate us for the amount by which the value of the settlement consideration paid to the Plaintiffs by us and the amount of the liabilities of ACT Group extinguished us exceeds the amount of the liabilities from us to Group extinguished under the Group Agreement.

Bridge Loan Transaction

During the period August through October 2004, we issued promissory notes aggregating \$500,000 face value for cash proceeds of \$450,000 and the assumption of \$50,000 of debt owed by our parent to the following related parties, in addition to other unrelated parties: Anthem Venture Management, LLC in the amount of \$100,000 and Gregory A. Bonfiglio in the amount of \$50,000. The notes bear interest at 10% per year.

As additional consideration for the purchase of the notes, on November 26, 2004, we granted warrants to certain related parties who were note holders entitling them to purchase shares of our common stock at an exercise price of \$0.05. Warrants were issued to Anthem Venture Management, LLC for 100,000 shares and to Gregory A. Bonfiglio for 50,000 shares that are exercisable on or after February 1, 2006 and expire February 1, 2008.

During the first quarter of 2005, the \$500,000 of notes, plus accrued interest of \$23,708, were converted into investment units consisting of 616,124 shares of common stock, plus 308,063 common stock purchase warrants, exercisable at \$1.27 per share.

#### Private Equity Financing

On November 26, 2004, in connection with the early release from escrow of funds related to our private equity financing, we granted to Andwell, LLC, a company affiliated with our Chief Executive Officer, William M. Caldwell, IV, warrants to purchase 250,000 shares of our common stock at an exercise price of \$0.05 per share. The warrants are exercisable for twenty four months from the date of issuance.

On September 15, 2005, in connection with the Securities Purchase Agreement dated September 15, 2005, Anthem Ventures Fund, L.P. purchased convertible debentures with a principal amount of \$1,255,000, convertible into 545,652 shares of common stock. In connection with the purchase of the debentures, we issued Anthem Ventures Fund, L.P. warrants to purchase 272,826 shares of our common stock at an exercise price of \$2.53 per share. As of December 31, 2006, Anthem Ventures Fund, L.P. was the beneficial owner of 11.2% of our outstanding common stock.

On September 15, 2005, in connection with the Securities Purchase Agreement dated September 15, 2005, The Shapiro Family Trust Dated September 29, 1989, purchased convertible debentures with a principal amount of \$251,000, convertible into 109,130 shares of common stock. In connection with the purchase of the debentures, we issued The Shapiro Family Trust Dated September 29, 1989, warrants to purchase 54,565 shares of our common stock at an exercise price of \$2.53 per share. Dr. Shapiro, one of our directors, may be deemed the beneficial owner of the securities owned by The Shapiro Family Trust.

On August 29, 2006, in connection with the warrant repricing described under Recent Developments above, we issued The Shapiro Family Trust Dated September 29, 1989, a replacement warrant to purchase 54,565 shares of our common stock at an exercise price of \$1.60 per share.

On September 6, 2006, in connection with the Securities Purchase Agreement described under Recent Developments above, Anthem Ventures Fund, L.P. purchased convertible debentures with a principal amount of \$627,500, convertible into 2,178,819 shares of common stock. In connection with the purchase of the debentures, we issued Anthem Ventures Fund, L.P. warrants to purchase 1,089,409 shares of our common stock at an exercise price of \$.3168 per share. As of December 31, 2006, Anthem Ventures Fund, L.P. was the beneficial owner of 11.2% of our outstanding common stock.

On September 6, 2006, in connection with the Securities Purchase Agreement described under Recent Developments above, The Shapiro Family Trust Dated September 29, 1989, purchased convertible debentures with a principal amount of \$125,500, convertible into 435,764 shares of common stock. In connection with the purchase of the debentures, we issued The Shapiro Family Trust Dated September 29, 1989, warrants to purchase 217,881 shares of our common stock at an exercise price of \$.3168 per share.

As reported in our Current Report on Form 8-K filed with the Securities and Exchange Commission on January 11, 2007, we closed amendments to the 2005 and 2006 transaction documents associated with the issuance of the warrants and debentures. Both Anthem Ventures Fund, LP and The Shapiro Family Trust Dated September 29, 1989, were party to these amendments.

#### Consulting Services

On September 1, 2004, we entered into a consulting agreement with Redberry Investments LLC, an entity owned by Gregory A. Bonfiglio, who is also a partner of Anthem Venture Partners, L.P. This consulting agreement was separate and independent from any involvement that Anthem Venture Partners, L.P. might have with our private equity financing. Pursuant to the consulting agreement, we agreed to grant Redberry Investments LLC a warrant to purchase 1,488,000 shares of our common stock at the exercise price of \$0.25, which vest on February 1, 2006, in consideration of consulting services provided by Redberry Investments LLC to us. The agreement terminated upon the private equity financing and our merger on January 31, 2005.

On December 13, 2004, we granted Andwell, LLC, an entity affiliated with our Chief Executive Officer, William M. Caldwell, IV, warrants to purchase 236,000 shares of our common stock at \$0.25 per share in consideration of consulting services provided by Andwell, LLC to us. The warrants are exercisable for twenty-four months from the date of issuance.

On December 13, 2004, we granted Rocket Ventures, LLC an entity affiliated with our General Counsel, Jonathan Atzen, warrants to purchase 75,000 shares of our common stock at \$0.25 per share in consideration of consulting services provided by Rocket Ventures, LLC. The warrants are exercisable for twenty-four months from the date of issuance.

On November 30, 2004, we granted Gunnar Engstrom, our former Chief Financial Officer, warrants to purchase 100,000 shares of our common stock at \$0.25 per share in consideration of termination of his employment agreement. The warrants are exercisable during the period of April 1, 2005, through April 1, 2010.

On January 15, 2005, we entered into a consulting agreement with Dr. Karen Chapman, the spouse of Dr. Michael West, our President and Chief Scientific Officer, pursuant to which Dr. Chapman is providing scientific consulting services. Dr. Chapman is to receive an annual payment of \$7,500. In addition, Dr. Chapman received 110,000 options to purchase our common stock under the Company s 2005 Stock Incentive Plan.

On September 14, 2005, in connection with consulting services provided to us, we issued a warrant to purchase 33,000 shares of common stock at an exercise price of \$2.53 per share to William Woodward, a partner of Anthem Venture Partners, L.P.

#### Executive Loan Agreement

On July 31, 2002, we entered into a loan agreement with Robert Lanza, our Vice President of Medical and Scientific Development, for \$140,000. Payments were made during the period of January 23, 2003 through January 7, 2005, and the loan was extinguished upon the merger on January 31, 2005.

Related Party Transactions Prior to Merger and Complete Change of Business

In our 10-KSB for the year ended December 31, 2003, we reported that an officer/shareholder of ours had made advances to us and had directly paid expenses on behalf of us in the amount of \$6,173, as of December 31, 2003. Because these advances related to our business prior to the merger and complete change of business on January 31, 2005, we do not believe that they are relevant or material to our current business.

### **Board Determination of Independence**

The Company complies with the standards of independence prescribed by rules set forth by the National Association of Securities Dealers (NASD). Accordingly, a director will only qualify as an independent director if, in the opinion of our Board of Directors, that person does not have a material relationship with our company which would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. A director who is, or at any time during the past three years, was employed by the Company or by any parent or subsidiary of the Company, shall not be considered independent. Accordingly, Dr. Alan Shapiro, Dr. Alan Walton, and Dr. Erkki Ruoslahti meet the definition of independent director under Rule 4200(A)(15) of the NASD Manual; Dr. West and Mr. Caldwell do not.

## MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

**Market Information** 

Our common stock is quoted on the OTC Bulletin Board under the symbol ACTC. For the periods indicated, the following table sets forth the high and low bid prices per share of our common stock. These prices represent inter-dealer quotations without retail markup, markdown, or commission and may not necessarily represent actual transactions. We have not provided price information prior to fiscal year 2005, in so far as we believe that the trading of our common stock prior to the merger is not material due to the fact that we effected a complete change of business operations following the merger.

Fiscal Year 2005	High Bid	Low Bid
First Quarter	\$ 7.00	\$ 1.90
Second Quarter	\$ 4.50	\$ 2.65
Third Quarter	\$ 2.90	\$ 2.00
Fourth Quarter	\$ 2.95	\$ 1.84
Fiscal Year 2006	High Bid	Low Bid
First Quarter	\$ 2.20	\$ 1.13
Second Quarter	\$ 1.62	\$ 0.51
Third Quarter	\$ 2.32	\$ 0.26
Fourth Quarter	\$ 0.99	\$ 0.52

Trades of our common stock are subject to Rule 15g-9 of the Securities and Exchange Commission, known as the Penny Stock Rule. This rule imposes requirements on broker/dealers who sell securities subject to the rule to persons other than established customers and accredited investors. For transactions covered by the rule, brokers/dealers must make a special suitability determination for purchasers of the securities and receive the purchaser s written agreement to the transaction prior to sale. The Securities and Exchange Commission also has rules that regulate broker/dealer practices in connection with transactions in penny stocks. Penny stocks generally are equity securities with a price of less than \$5.00, other than securities registered on certain national securities exchanges or quoted on the NASDAQ system, provided that current price and volume information with respect to transactions in that security is provided by the exchange or system. The Penny Stock Rules requires a broker/dealer, prior to a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document prepared by the Commission that provides information about penny stocks and the nature and level of risks in the penny stock market. The broker/dealer also must provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker/dealer and its salesperson in the transaction, and monthly account statements showing the market value of each penny stock held in the customer s account. The bid and offer quotations, and the broker/dealer and salesperson compensation information, must be given to the customer orally or in writing prior to effecting the transaction and must be given to the customer in writing before or with the customer s confirmation. These disclosure requirements have the effect of reducing the level of trading activity in the secondary market for our common stock. As a result of these rules, investors may find it difficult to sell their shares

#### **Holders**

As of March 16, 2007, there were approximately 3,000 record owners of our common stock.

#### **Dividends**

We have never paid cash dividends and have no plans to do so in the foreseeable future. Our future dividend policy will be determined by our board of directors and will depend upon a number of factors,

including our financial condition and performance, our cash needs and expansion plans, income tax consequences, and the restrictions that applicable laws, our current preferred stock instruments, and our future credit arrangements may then impose.

Currently under Delaware law, unless further restricted in its certificate of incorporation, a corporation may declare and pay dividends out of surplus, or if no surplus exists, out of net profits for the fiscal year in which the dividend is declared and/or the preceding fiscal year (provided that the amount of capital of the corporation is not less than the aggregate amount of the capital represented by the issued and outstanding stock of all classes having a preference upon the distribution of assets).

#### **EXECUTIVE COMPENSATION**

The following table summarizes the annual compensation paid to our named executive officers for the two years ended December 31, 2006 and 2005:

#### **Summary Compensation Table**

Name and Principal Position  Year  (\$)  (\$)  (\$)  (\$)  (\$)  William M. Caldwell, IV,  Chief Executive Officer and  2005  241,333  125,000  40,544  Chairman of the Board  of Directors  Michael P. W. (*)  (\$)  (\$)  (\$)  40,544  15,000  (1)  2006  241,333  25,000  5 (450)  5 (550)  5 (550)  (\$)	(\$) 439,198 406,877
Chief Executive Officer and 2005 241,333 125,000 40,544 Chairman of the Board of Directors	, , , , , , , , , , , , , , , , , , ,
Chairman of the Board of Directors	406,877
of Directors	
M: 1 1D W 4 DI D 2006 264 422 (5.000 56.450 5.050 (2)	
Michael D. West, Ph.D., 2006 264,422 65,000 56,459 5,058 (2)	390,939
President, Chief Scientific 2005 246,745 90,000 92,948 5,934 (2)	435,627
Officer and Member of the	
Board of Directors	
Robert P. Lanza, M.D., 2006 235,577 145,000 35,005 8,877 4,523 (2)	428,982
Vice President of 2005 292,593 51,638 27,122 6,485 (2)	377,838
Medical & Scientific	
Development	
James G. Stewart, 2006 173,268 40,000 32,627 69,903 (3)	315,798
Sr. Vice President and Chief 2005 175,458 80,000 92,666 4,309 (2)	352,433
Financial Officer(4)	
Ivan Wolkind, 2006 163,846 20,000 35,005 35,947 3,162 (2)	257,960
Vice President of Finance and 2005 69,027 14,978 25,924 (6)	109,929
Chief Accounting Officer(5)	
Jonathan F. Atzen, 2006 254,807 90,000 71,894 6,391 16,877 (7)	439,969
Sr. Vice President, 2005 154,921 80,000 6,391 9,000 (8)	250,312
General Counsel and	
Secretary	

Please see the assumptions relating to the valuation of our stock option awards which are contained in Notes to our unaudited and audited Financial Statements contained in this prospectus.

- (1) This amount represents a gross-up tax reimbursement relating to a portion of the bonus paid to Mr. Caldwell.
- (2) Represents contributions made by the Company with respect to the Company's 401(k) plan.
- (3) This amount represents \$3,653 in contributions made by the Company with respect to the Company s 401(k) Plan and \$66,249 paid to Mr. Stewart in connection with consulting services provided to the Company following his resignation.
- (4) Effective as of August 17, 2006, Mr. Stewart resigned as Chief Financial Officer and terminated his employment arrangement with the Company.
- (5) Mr. Wolkind became employed as the Company s Vice President of Finance and Chief Accounting Officer in September 2006.

- (6) Represents \$25,000 in payments made to Mr. Wolkind in connection with consulting services provided to the Company in 2005 and \$924 in contributions made by the Company with respect to the Company s 401(k) Plan.
- (7) Represents \$12,000 in payments made to Mr. Atzen as part of his \$1,000 monthly car allowance and \$4,877 in contributions made by the Company with respect to the Company s 401(k) Plan.
- (8) Represents payments made to Mr. Atzen as part of his \$1,000 monthly car allowance.

#### **Employment Contracts, Termination of Employment and Change-in-Control Arrangements**

Employment Agreement with Michael D. West, Ph.D. On December 31, 2004, we entered into an employment agreement with our President and Chief Scientific Officer, Dr. West. The agreement provides for annual compensation in the amount of \$200,000 increasing to \$250,000 upon the completion of an equity financing that results in increased financing to us of at least \$10 million, and an annual bonus of \$50,000 until Dr. West s salary reaches \$250,000, after which any bonus shall be paid at the discretion of the Board of Directors. Pursuant to his agreement, Dr. West received 3,180,223 stock options under the 2005 Stock Plan, which vest in equal monthly installments over 48 months. In the event of a change of control of us, 50% of any unvested options held by Dr. West will become vested. The agreement provides for severance in the event of termination without cause in the amount of twelve months base salary and accelerated vesting of 50% of any unvested options. In the event of termination without cause following a change of control, Dr. West is entitled to receive a lump sum severance equal to twelve months base salary and accelerated vesting of 100% of any unvested options.

Dr. West s agreement contains non-solicitation, confidentiality and non-competition covenants, and a requirement that Dr. West assign all invention and intellectual property rights to us. The agreement may be terminated by either party with or without cause with thirty days written notice.

Employment Agreement with William M. Caldwell, IV. On December 31, 2004, we entered into an employment agreement with William M. Caldwell, IV, our Chief Executive Officer. The agreement provides for annual compensation in the amount of \$200,000, increasing to \$250,000 upon the completion of an equity financing that results in increased financing to us of at least \$10 million, and an annual bonus of \$50,000 until Mr. Caldwell s salary reaches \$250,000, after which any bonus shall paid be at the discretion of the Board of Directors. We have also agreed to reimburse Mr. Caldwell for certain commuting expenses through June 2005 and relocation expenses after June 2005. Pursuant to his agreement, Mr. Caldwell received 1,903,112 options under the 2005 Stock Plan, 25% of which vested upon grant with the remainder vesting in equal monthly installments over 30 months. In the event of a change of control of us, 50% of any unvested options held by Mr. Caldwell will become vested. The agreement provides for severance in the amount of six months salary in the event Mr. Caldwell s employment is terminated without cause and accelerated vesting of 50% of any unvested options. In the event Mr. Caldwell s employment is terminated without cause following a change of control, he is entitled to a lump sum severance payment equal to six months base salary and accelerated vesting of 100% of any unvested stock options.

Mr. Caldwell s agreement contains non-solicitation, confidentiality and non-competition covenants, and a requirement that Mr. Caldwell assign all invention and intellectual property rights to us. The agreement may be terminated by either party with or without cause with thirty days written notice.

Employment Agreement with Robert P. Lanza, M.D. On February 1, 2005, we entered into an employment agreement with Robert P. Lanza, M.D., our Vice President of Medical and Scientific Development. The agreement provides for annual compensation in the amount of \$215,000, plus a performance-based bonus of \$35,000 for fiscal year 2005 upon the achievement of certain milestones established by the Chief Scientific Officer. Dr. Lanza received 500,000 stock options under the 2005 Stock

Plan, which vest in equal monthly installments over 48 months. In addition, on September 16, 2005, Dr. Lanza was awarded 250,000 options that were immediately vested. In the event Dr. Lanza s employment is terminated following a change of control, 100% of any unvested options will become vested. In the event Dr. Lanza continues in the employment of a successor company following a change of control, the vesting of Dr. Lanza s unvested options will be accelerated by one year. Dr. Lanza s agreement provides for severance in the amount of twelve months salary following termination of employment (1) as a result of disability, (2) without cause, (3) by Dr. Lanza following a material change in duties or a material breach by us, or (4) as a result of a change of control.

Dr. Lanza s agreement contains non-solicitation, confidentiality and non-competition covenants, and a requirement that Dr. Lanza assign all invention and intellectual property rights to us. The term of the agreement expires February 1, 2009, which may be renewed by the parties in writing.

Employment Agreement with Robert W. Peabody. On February 1, 2005, we entered into an employment agreement with Robert W. Peabody, our Vice President of Grant Administration. The agreement provides for annual compensation in the amount of \$150,000, increasing to \$195,000 upon the earlier of the completion of an equity financing that results in increased financing to us of at least \$10 million or the receipt of \$5 million in grants awards. The agreement provides for an annual bonus as determined by our Chief Executive Officer and our Board of Directors; provided, however, that Mr. Peabody is entitled to an annualized prorated portion of \$45,000 in the event we secure \$10 million in increased financing or \$5 million in grants. Pursuant to his agreement, Mr. Peabody received 400,000 options under the 2005 Stock Plan, which vest in equal monthly installments over 48 months. In the event of a change of control of us, 50% of any unvested options will become vested. The agreement provides for severance in the amount of six months salary in the event Mr. Peabody s employment is terminated without cause and accelerated vesting of 50% of any unvested options. In the event Mr. Peabody s employment is terminated without cause following a change of control, he is entitled to a lump sum severance payment equal to six months base salary and accelerated vesting of 100% of any unvested stock options.

Mr. Peabody s agreement contains non-solicitation, confidentiality and non-competition covenants, and a requirement that Mr. Peabody assign all invention and intellectual property rights to us. The agreement may be terminated by either party with or without cause with thirty days written notice.

Employment Agreement with James G. Stewart. On March 13, 2005, we entered into an employment agreement with James G. Stewart, our Senior Vice President and Chief Financial Officer. Effective as of August 17, 2006, Mr. Stewart resigned as Chief Financial Officer and terminated his employment arrangement with the Company. In connection with Mr. Stewart s resignation, we entered into a ninety day consulting agreement with Mr. Stewart which provides for monthly payments to Mr. Stewart in the amount of approximately \$22,000.

Employment Agreement with Jonathan F. Atzen. On April 1, 2005, we entered into an employment agreement with Jonathan F. Atzen, our Senior Vice President and General Counsel. The agreement provides for annual compensation of \$195,000, increasing to \$245,000 upon the completion of an equity financing that results in increased financing to us of at least \$10 million. The agreement provides for an annual bonus as determined by our Chief Executive Officer and our Board of Directors. Mr. Atzen received a one-time advance of an annual bonus in the amount of \$40,000. Mr. Atzen was awarded 400,000 stock options under the 2005 Stock Plan, 10% of which vested upon grant with the remainder vesting in equal monthly installments over 48 months. In the event of a change of control of us, 50% of any unvested options held by Mr. Atzen will become vested. In the event Mr. Atzen s employment is terminated without cause by us or for good reason by Mr. Atzen, he is entitled to a lump sum severance payment equal to six months base salary, accelerated vesting of 50% of his unvested stock options, and reimbursed cost of medical coverage for a period of six months. In the event Mr. Atzen is terminated without cause following

a change of control, he is entitled to a lump sum severance payment equal to six months base salary and accelerated vesting of 50% of any unvested stock options.

Mr. Atzen s agreement contains non-solicitation, confidentiality and non-competition covenants, and a requirement that Mr. Atzen assign all invention and intellectual property rights to us. The agreement may be terminated by either party with or without cause with thirty days written notice.

Employment Agreement with Ivan Wolkind. On May 10, 2005, we entered into an agreement with Ivan Wolkind in connection with his hiring as VP Finance-Controller. The agreement initially provided for annual compensation of \$150,000, which, effective as of October 1, 2006, was increased to \$195,000 in connection with his appointment as our Vice President of Finance and Chief Accounting Officer. The agreement provides for annual bonuses as determined by our Chief Executive Officer, including the payment of a bonus in the amount of \$30,000 upon certain performance milestones. Upon execution of the agreement, Mr. Wolkind was awarded 100,000 stock options under the 2005 Stock Plan, 6.25% of which vested upon grant with the remainder vesting in equal monthly installments over 45 months. In the event of a change of control of us, 100% of any unvested options held by Mr. Wolkind will become vested. In the event Mr. Wolkind s employment is terminated without cause by us, he is entitled to a lump sum severance payment equal to six months base salary, and accelerated vesting of 50% of his unvested stock options.

Mr. Wolkind s agreement contains non-solicitation, confidentiality and non-competition covenants, and a requirement that Mr. Wolkind assign all invention and intellectual property rights to us. The agreement may be terminated by either party with or without cause with thirty days written notice.

#### **Outstanding Equity Awards at Fiscal Year-End**

Name	Option Awards Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexecuted Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
William M. Caldwell, IV,	564,286 (1)	86,875	0.25	12/13/2014
Chief Executive Officer and	1,570,067 (2)	333,045	0.85	1/31/2015
Chairman of the Board of Directors				
Michael D. West, Ph.D.,	1,500,000 (3)		0.05	8/12/2014
President, Chief Scientific Officer	1,590,112 (4)	1,590,112	0.85	1/31/2015
and Member of the Board of Directors				
Robert P. Lanza, M.D.,	750,000 (5)		0.05	8/12/2014
Vice President of Medical	239,583 (6)	260,417	0.85	1/31/2015
& Scientific Development	250,000 (7)		2.20	9/15/2015
James G. Stewart,	154,583 (8)		0.85	1/31/2015
Sr. Vice President and	52,083 (9)		2.20	9/15/2015
Chief Financial Officer	, , , ,			
Ivan Wolkind,	41,667 (10)	58,333	2.48	8/1/2015
Vice President of Finance				
and Chief Accounting				
Officer				
Jonathan F. Atzen,	212,500 (11)	187,500	0.85	1/31/2015
Sr. Vice President, General Counsel				
and Secretary				

- (1) These options held by Mr. Caldwell vest as follows: 25% vested immediately upon grant with the remainder vesting in equal monthly installments over 30 months.
- (2) These options held by Mr. Caldwell vest as follows: 25% vested immediately upon grant with the remainder vesting in equal monthly installments over 30 months.
  - (3) These options held by Dr. West vested in full as of December 31, 2006.
  - (4) These options held by Dr. West vest in equal monthly installments over 48 months.
  - (5) These options held by Dr. Lanza vested in full as of December 31, 2006.
  - (6) These options held by Dr. Lanza vest in equal monthly installments over 48 months.
  - (7) These options held by Dr. Lanza vested in full as of December 31, 2006.
- (8) Effective as of August 17, 2006, Mr. Stewart resigned as Chief Financial Officer and terminated his employment arrangement with the Company. Mr. Stewart s unvested options as of the date of his resignation were canceled.
  - (9) Mr. Stewart s unvested options as of the date of his resignation were canceled.
- (10) Mr. Wolkind s options vest as follows: 6,250 vested immediately upon grant with the remainder vesting in equal monthly installments over 45 months.
- (11) Mr. Atzen's options vest as follows: 40,000 vested immediately upon grant with the remainder vesting in equal monthly installments over 48 months.

#### DIRECTOR COMPENSATION

	Fees Earned or			
Name	Paid in Cash (\$)	Stock Awards (\$)	Option Awards (\$)	Total (\$)
Alan C. Shapiro, Ph.D.		36,000 (1)	17,503	53,503
Alan G. Walton, Ph.D., D.Sc.	36,000		85,835	121,835
Erkki Ruoslahti, M.D., Ph.D.	36,000		85,835	121,835

This amount represents the fair market value of certain issuances of stock (at the time of issuance) to Dr. Shapiro in payment of fees earned in connection with his services as a member of the Board of Directors.

#### **Director Compensation Arrangements**

Non-executive members of the Company s Board of Directors receive (1) a initial grant of 100,000 shares of common stock, (2) an annual grant of options to purchase 25,000 shares of common stock, (3) an annual retainer of \$20,000 and (4) a cash payment for attendance at each board meeting in the amount of \$1,500 for in-person meetings and \$1,000 for telephonic meetings. Regarding members of the Company s Audit Committee, the Chair receives a payment of \$1,500 per meeting and the regular members receive \$1,000 per meeting. With respect to the Company s Compensation Committee and the Company s Nominating and Corporate Governance Committee, the Chair receives a payment of \$1,125 per meeting and the regular members receive \$750 per meeting. Each director is entitled to receive payment of the directors fees in the form of shares of the Company s Common Stock valued at 150% of the actual directors fees due and payable. The fee structure for the directors was established and approved by the Compensation Committee and ratified by the full Board of Directors.

#### CORPORATE GOVERNANCE

#### General

We believe that good corporate governance is important to ensure that Advanced Cell Technology, Inc. is managed for the long-term benefit of our stockholders. This section describes key corporate governance practices that we have adopted.

### **Board of Directors Meetings and Attendance**

The Board of Directors has responsibility for establishing broad corporate policies and reviewing our overall performance rather than day-to-day operations. The primary responsibility of our Board of Directors is to oversee the management of our company and, in doing so, serve the best interests of the company and our stockholders. The Board of Directors selects, evaluates and provides for the succession of executive officers and, subject to stockholder election, directors. It reviews and approves corporate objectives and strategies, and evaluates significant policies and proposed major commitments of corporate resources. Our Board of Directors also participates in decisions that have a potential major economic impact on our company. Management keeps the directors informed of company activity through regular communication, including written reports and presentations at Board of Directors and committee meetings.

We have no formal policy regarding director attendance at the annual meeting of stockholders, although all directors are expected to attend the annual meeting of stockholders if they are able to do so. The Board of Directors held eight meetings in 2006, three of which were telephonic. All five board members were present, either by person or on the telephone in the case of the telephonic meetings, at all eight meetings.

#### **Board Committees**

Our Board of Directors has established an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. The members of each committee are appointed by our Board of Directors, upon recommendation of the Nominating Committee, and serve one-year terms. Each of these committees operates under a charter that has been approved by the Board of Directors. The charter for each committee is available on our website. The Audit Committee met four times during 2006. The Compensation Committee met four times during 2006. The Nominating Committee did not meet during 2006.

#### **Audit Committee**

The Audit Committee s responsibilities include:

- Monitoring the integrity of the Company s financial reporting process and systems of internal controls regarding finance, accounting and legal compliance.
- Monitoring the independence and performance of the Company s internal and independent auditors.
- Monitoring compliance by the Company with legal and regulatory requirements.
- Facilitating open communication among the Company s independent auditors, internal auditors, employees, management, and the Board.

Dr. Shapiro, Dr. Walton, and Dr. Ruoslahti serve on our Audit Committee. Dr. Shapiro serves as chair of the Audit Committee. The Board of Directors has determined that Dr. Shapiro is an audit committee financial expert as defined in Item 401(e) of Regulation S-B. The board has determined that Dr. Shapiro meets the additional independence requirements of Rule 10A-3 under the Securities Exchange Act of 1934.

### **Compensation Committee**

The Compensation Committee s responsibilities include:

- reviewing and recommending approval of the compensation of our executive officers;
- overseeing the evaluation of our senior executives;
- reviewing and making recommendations to the Board of Directors regarding incentive compensation and equity-based plans;
- administering our stock incentive plans; and
- reviewing and making recommendations to the Board of Directors regarding director compensation.

The members of the Compensation Committee are Dr. Shapiro, Dr. Walton, Dr. Ruoslahti and William M. Caldwell, IV.

#### Nominating Committee

The Nominating Committee s responsibilities include:

- identifying individuals qualified to become board members;
- recommending to the Board the persons to be nominated for election as directors and to each of the Board s committees;

- reviewing and making recommendations to the Board with respect to senior management succession planning; and
- overseeing an annual evaluation of the Board.

The members of the Nominating Committee are Dr. Shapiro, Dr. Walton, and Dr. Ruoslahti.

#### **Director Candidates**

The process followed by the Nominating Committee to identify and evaluate director candidates includes requests to board members and others for recommendations, meetings from time to time to evaluate biographical information and background material relating to potential candidates and interviews of selected candidates by members of the Nominating Committee and the Board.

In considering whether to recommend any particular candidate for inclusion in the Board s slate of recommended director nominees, the Nominating Committee applies certain criteria, including

- the candidate s honesty, integrity and commitment to high ethical standards,
- demonstrated financial and business expertise and experience,
- understanding of our company, its business and its industry,
- · actual or potential conflicts of interest, and
- the ability to act in the interests of all stockholders.

The Nominating Committee does not assign specific weights to particular criteria and no particular criterion is a prerequisite for each prospective nominee. We believe that the backgrounds and qualifications of our directors, considered as a group, should provide a significant breadth of experience, knowledge and abilities that will allow our Board to fulfill its responsibilities.

The Nominating Committee will consider director candidates recommended by stockholders or groups of stockholders who have owned more than 5% of our common stock for at least a year as of the date the recommendation is made. Stockholders may recommend individuals to the Nominating Committee for consideration as potential director candidates by submitting their names, together with appropriate biographical information and background materials and a statement as to whether the stockholder or group of stockholders making the recommendation has beneficially owned more than 5% of our common stock for at least a year as of the date such recommendation is made, to the Nominating Committee, c/o Corporate Secretary, Advanced Cell Technology, Inc., 1201 Harbor Bay Parkway, Alameda, CA 94502. Assuming that appropriate biographical and background material have been provided on a timely basis, the Committee will evaluate stockholder- recommended candidates by following substantially the same process, and applying substantially the same criteria, as it follows for candidates submitted by others.

#### **Communicating with the Directors**

The Board will give appropriate attention to written communications that are submitted by stockholders, and will respond if and as appropriate. The chair of the Audit Committee is primarily responsible for monitoring communications from stockholders and for providing copies or summaries to the other directors as he considers appropriate.

Communications are forwarded to all directors if they relate to important substantive matters and include suggestions or comments that the chair of the Audit Committee considers to be important for the directors to know. In general, communications relating to corporate governance and corporate strategy are

more likely to be forwarded than communications relating to ordinary business affairs, personal grievances and matters as to which we tend to receive repetitive or duplicative communications.

Stockholders who wish to send communications on any topic to the board should address such communications to the Board of Directors, c/o Corporate Secretary, Advanced Cell Technology, Inc., 1201 Harbor Bay Parkway, Alameda, CA 94502. You should indicate on your correspondence that you are an Advanced Cell Technology, Inc. stockholder.

Anyone may express concerns regarding questionable accounting or auditing matters or complaints regarding accounting, internal accounting controls or auditing matters to the Audit Committee by calling (508) 756-1212. Messages to the Audit Committee will be received by the chair of the Audit Committee and our Corporate Secretary. You may report your concern anonymously or confidentially.

#### Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires the Company's directors, executive officers and persons who own more than 10% of the Company's stock (collectively, Reporting Persons) to file with the SEC initial reports of ownership and changes in ownership of the Company's common stock. Reporting Persons are required by SEC regulations to furnish the Company with copies of all Section 16(a) reports they file. To the Company's knowledge, based solely on its review of the copies of such reports received or written representations from certain Reporting Persons that no other reports were required, the Company believes that during its fiscal year ended December 31, 2006, all Reporting Persons timely complied with all applicable filing requirements except as follows: Alan Shapiro was late in filing three reports concerning seven transactions. Erkki Ruoslahti and Alan Walton were each late in filing one report concerning two transactions. Robert Lanza, Jonathan Atzen, and Ivan Wolkind were each late in filing one report concerning one transaction. These individuals subsequently filed their delinquent Forms.

#### **Code of Ethics**

We have adopted a code of business conduct and ethics that applies to our directors, officers (including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions) as well as our employees. A copy of our code of business conduct and ethics is available on our website at www.advancedcell.com under Investors Corporate Governance. We intend to post on our website all disclosures that are required by applicable law, the rules of the Securities and Exchange Commission or OTCBB listing standards concerning any amendment to, or waiver from, our code of business conduct and ethics.

#### FINANCIAL STATEMENTS

See the Financial Statements beginning on page F-1 of this prospectus.

### CHANGES IN CERTIFYING ACCOUNTANTS

Pritchett, Siler & Hardy, P.C., referred to as Pritchett, served as our independent auditors for the fiscal years ended December 31, 2004 and 2003. Stonefield Josephson, Inc., referred to as Stonefield, served as independent auditors for ACT for the fiscal years ended December 31, 2004 and 2003. Upon consummation of the January 2005 merger, the financial statements of ACT became our financial statements. Accordingly, we elected to change independent accountants and to retain ACT s historical independent accountants, Stonefield Josephson, Inc.

• On May 4, 2005, we dismissed Pritchett as our independent registered public accounting firm. Pritchett had served as our independent registered public accounting firm since our inception.

- The reports of Pritchett on our financial statements for fiscal year ended December 31, 2004 contained no adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope, or accounting principles.
- The decision to dismiss Pritchett was based on the explanation set forth above and was approved by our full Board of Directors at such time.
- During fiscal year 2004 and the subsequent interim period through the date of the dismissal, we had no disagreement with Pritchett on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreement, if not resolved to the satisfaction of Pritchett, would have caused them to make reference to such disagreement in connection with their reports for such periods.
- During fiscal year 2004 and the subsequent interim period through the date of the dismissal, there have been no reportable events (as defined in Regulation S-B, Item 304).
- We provided Pritchett with a copy of the above disclosures and requested that they furnish us with a letter addressed to the Securities and Exchange Commission stating whether they agree with the above statements and, if not, stating the respects in which they do not agree. A copy of the letter from Pritchett is attached to our Current Report on 8-K dated May 4, 2005.

#### ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form SB-2 under the Securities Act for the common stock offered by this prospectus. This prospectus, which is a part of the registration statement, does not contain all of the information in the registration statement and the exhibits filed with it, portions of which have been omitted as permitted by SEC rules and regulations. For further information concerning us and the securities offered by this prospectus, please refer to the registration statement and to the exhibits filed with it. Statements contained in this prospectus as to the content of any contract or other document referred to are not necessarily complete. In each instance, we refer you to the copy of the contracts and /or other documents filed as exhibits to the registration statement and these statements are qualified in their entirety by reference to the contract or document.

The registration statement, including all exhibits, may be inspected without charge at the SEC s Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549, and at the SEC s regional offices located at the Woolworth Building, 233 Broadway, New York, New York 10279 and Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. Copies of these materials may also be obtained from the SEC s Public Reference at 100 F Street, N.E., Room 1580, Washington D.C. 20549, upon the payment of prescribed fees. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The registration statement, including all exhibits and schedules and amendments, has been filed with the SEC through the Electronic Data Gathering, Analysis and Retrieval system, known as EDGAR, and is publicly available through the SEC s Website located at http://www.sec.gov.

### ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY

### CONSOLIDATED FINANCIAL STATEMENTS

### **December 31, 2006**

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#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

#### To the Board of Directors and Stockholders of Advanced Cell Technology, Inc. Alameda, California

We have audited the accompanying consolidated balance sheet of Advanced Cell Technology, Inc. as of December 31, 2006 and the related consolidated statements of operations, stockholders—deficit, and cash flows for each of the years in the two-year period ended December 31, 2006. 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 the 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. The company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, 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 financial statements referred to above present fairly, in all material respects, the consolidated financial position of Advanced Cell Technology, Inc. as of December 31, 2006 and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2006 in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 11 to the consolidated financial statements, in 2006 the Company adopted Statement of Financial Accounting Standards No. 123 (Revised 2004), Share-Based Payment.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has minimal sources of revenue, incurred substantial net losses, has substantial monetary liabilities in excess of monetary assets and accumulated deficits as of December 31, 2006. These matters, among others, raise a substantial doubt about the Company s ability to continue as a going concern. Management s plans concerning these matters are described in Note 1. These consolidated financial statements do not included any adjustments relating to the recoverability and classification of recorded assets, or amounts and classification of liabilities that might be necessary in the event the Company cannot continue in existence.

/s/ Stonefield Josephson, Inc. Los Angeles, California March 16, 2007

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# ITEM 7. FINANCIAL STATEMENTS

# ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY

# CONSOLIDATED BALANCE SHEET

	December 31, 2006
ASSETS	
Current assets:	
Cash and cash equivalents	\$ 8,689,336
Accounts receivable, net of allowance for doubtful accounts of \$236,399	66,319
Prepaid expenses	111,229
Deferred royalty fees, current portion	225,475
Total current assets	9,092,359
Property and equipment, net	1,081,680
Deferred royalty fees, less current portion	1,062,620
Deposits	133,841
Deferred issuance costs, net of amortization of \$1,035,120	5,619,218
Total assets	\$ 16,989,718
LIABILITIES AND STOCKHOLDERS DEFICIT	
Current liabilities:	
Accounts payable	\$ 3,067,825
Accrued expenses	1,023,583
Deferred revenue, current portion	432,509
Interest payable	75,833
Advances payable other	130,000
2005 Convertible debenture and embedded derivatives, net of discounts of \$3,713,554	7,354,706
2006 Convertible debenture and embedded derivatives (fair value \$5,472,177)	3,971,543
Warrant Derivatives current portion	2,264,175
Capital leases current portion	77,594
Notes payable other	638,674
Total current liabilities	19,036,442
2005 Convertible debenture and embedded derivatives, less current portion and net of discounts of	
\$1,571,332	3,112,029
2006 Convertible debenture and embedded derivatives, less current portion (fair value \$12,768,413)	9,266,933
Warrant derivatives, less current portion	12,987,967
Capital leases, less current portion	31,971
Deferred revenue, less current portion	2,096,700
Total liabilities	46,532,042
Commitments and contingencies	
Stockholders deficit:	
Common stock, \$0.001 par value; 500,000,000 shares authorized, 39,318,070 issued and outstanding	39,318
Preferred stock, \$0.001 par value; 50,000 shares authorized, 0 issued and outstanding	
Additional paid-in capital	12,291,873
Accumulated deficit	(41,873,515
Total stockholders deficit	(29,542,324
Total liabilities and stockholders deficit	\$ 16.989.718

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

# ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY

# CONSOLIDATED STATEMENTS OF OPERATIONS

	Year ended December 31, 2006		2005			
Revenue:						
License fees and royalties	\$	440,842		\$	395,007	
Cost of revenue	314,04	13		181,8	22	
Gross profit	126,79	19		213,1	85	
Operating expenses:						
Research and development	9,026,	599		2,606	,372	
Grant reimbursements	(369,4	46	)	(741,	598	)
General and administrative	9,152,	224		9,304	,482	
Total operating expenses	17,809	,377		11,16	9,256	
Loss from operations	(17,68	2,578	)	(10,95)	56,071	)
Other income (expense):						
Interest income	424,48	37		200,8	76	
Gain on sale of asset	767,04	0				
Loss on extinguishment of debt	(263,4)	64	)			
Gain on settlement of debt				1,052	,814	
Interest expense and late fees	(11,27)	2,127	)	(3,590)	0,686	)
Charges related to issuance of Convertible Debentures	(11,16	8,629	)			
Charges related to repricing and issuance of warrants	(7,501	,060	)			
Interest expense stockholder				(60,00)	00	)
Adjustments to fair value of derivatives	27,976	5,393		3,959	,289	
Total other income (expense)	(1,037	,360	)	1,562	,293	
Net Loss	\$	(18,719,938	)	\$	(9,393,778	)
Basic and diluted loss per share	\$	(0.64	)	\$	(0.43	)
Shares used in computation of basic and diluted loss per share	29,230	,829		22,00	5,978	

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

# ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY

# CONSOLIDATED STATEMENT OF STOCKHOLDERS DEFICIT FOR THE TWO YEARS ENDED DECEMBER 31, 2006

	D . 6 1 C4 .		C	,	Additional	D. f I	A 1.4.1	Total
	Preferred Stoo		Common Stoo		Paid-In	Deferred	Accumulated	Stockholder s Deficit
Balance, December 31, 2004	Shares	Amount	8,325,883	<b>Amount</b> 8,326	<b>Capital</b> 6,180,539	Compensation (21,585)	<b>Deficit</b> (13,759,799	)(7,592,519
Sale of preferred units for			0,0 =0,000	0,000	0,000,000	(==,=== )	(==,,==,,,,,	)(1,000,000
cash net of costs of offering								
of approximately \$576,000	9,306,601	9,306			7,414,765			7,424,071
Issuance of preferred units for		105			00.205			00.400
services provided Issuance of shares for debt	105,177	105			89,295			89,400
conversion			616,124	616	523,092			523,708
Issuance of shares for			,		,			
services			17,647	18	14,982			15,000
Issuance of units for offering			160 015	460	200 201			200.000
services Conversion of preferred	(0.411.779.)	(9,411	469,247	469	398,391			398,860
Shares retained by public	(9,411,778)	(9,411	9,411,778	9,411				
shareholders			4,374,007	4,374	5,626			10,000
Options / Warrants issued to				,	•			·
consultants					1,536,027			1,536,027
Shares cancelled			(353,627 )		) (802,556	)		(802,909 )
Options Exercised			124,083	124	7,747 346,644			7,871 346,644
Stock based compensation Shares issued in settlement of					340,044			340,044
accounts payable			195,000	195	461,230			461,425
Warrants issued in connection			,		,			•
with ACT Group matters					469,966			469,966
Reclassification of warrants					(27, (40, 700	`		(27.649.799
to liabilities Issuance of shares to board					(27,648,789	)		(27,648,789)
member			2,813	3	5,623			5,626
Issuance of shares for			2,010		0,020			5,020
convertible debenture								
conversion			167,174	167	534,503			534,670
Issuance of shares for			90,566	91	(91	`		
cashless exercise of warrant Net loss for the twelve			90,300	91	(91	)		
months ended December 31,								
2005							(9,393,778	) (9,393,778
Balance at December 31,								
2005			23,440,695	\$ 23,441		) \$ (21,585)	\$ (23,153,577	(33,614,729)
Cashless Exercise of warrant Exercise of warrant in			63,208	63	(63	)		
settlement of note payable			3,283,726	3,284	2,612,325			2,615,609
Stock option Exercises			26,000	26	6,074			6,100
Convertible Debenture								
Redemption			5,657,406	5,657	4,541,628			4,547,285
Issued to employees Exercise of warrants			780,000 4,541,672	780 4,542	217,620 4,310,045			218,400 4,314,587
Repricing and issuance of			7,571,072	¬1,J¬1∠	7,510,045			T,J1T,JU/
warrants					6,629,883			6,629,883
Transfer deferred								
compensation to APIC					(21,585	) 21,585		
Convertible Debenture Conversion			1,317,748	1,318	3,851,361			3,852,679
Issuance of stock in payment			1,317,748	1,310	3,031,301			3,034,019
of board fees			44,216	44	19,706			19,750
Option compensation charges					349,487			349,487
Issuance of stock in payment			162.200	162	220, 400			220 562
of license fees			163,399	163	238,400		(19.710.029	238,563
Net loss for the twelve months ended December 31,							(18,719,938	)(18,719,938 )
The state becomes 51,								

2006				
Balance at December 31,				
2006	39,318,070	\$ 39,318 \$	12,291,873	\$ \$ (41,873,515)\$ (29,542,324)

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

# ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY

# CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year 1 2006	Ended Decemb	oer 31,	2005		
CASH FLOWS FROM OPERATING ACTIVITIES:						
Net loss	\$	(18,719,938	)	\$	(9,393,778	)
Adjustments to reconcile net loss to net cash used in operating activities:						
Depreciation and amortization	290,53	36		107,3		
Bad debt				51,512		
Amortization of deferred charges	437,60	)6		119,70	62	
Amortization of deferred revenue	(365,8	41	)	(332,5	507	)
Amortization of deferred issuance costs	1,050,	358		207,0	29	
Shares issued for services				15,000	0	
Equity instruments issued for compensation	760,20	08		1,696.	,695	
Amortization of discounts	10,204	,080		3,001.	,734	
Gain (Loss) on extinguishment of debt	263,46	54		(1,052	2,814	)
Adjustments to Fair Value of Derivatives	(27,97	6,393	)	(3,959	,289	)
Issuance and repricing of warrants	7,501,0	060				
Issuance of Convertible Debentures	11,168	3,629				
Non-cash compensation charge	635,92					
Changes in operating assets and liabilities:						
(Increase) decrease in:						
Accounts receivable	68,557	1		(82,23	38	)
Prepaid expenses	61,811			(141,7		)
Deferred charges	(678,5		)	( , .		
Deposits	()-			(87,23	38	)
Increase (decrease) in:				(0.,=0		
Accounts payable	953,84	12		36,480	0	
Accrued expenses	150,06			1,505.		
Interest payable	(11,25		)	112,6		
Advances to stockholder	(,			(315,4		)
Deferred revenue	900,00	00		(===,		,
Net cash used in operating activities	(13,30		)	(8,510	).945	)
CASH FLOWS FROM INVESTING ACTIVITIES:	( - )	- ,		(-)-	-	/
Cash acquired in acquisition				10,000	0	
Purchases of property and equipment	(564,8	05	)	(603,7	735	)
Payment of deposits	(28.64		)	(002).		
Net cash used in investing activities	(593,4	-	)	(593,7	135	)
CASH FLOWS FROM FINANCING ACTIVITIES:	(-,-,			(-,-,		
Proceeds from preferred unit subscriptions, net of cost				3,658.	.930	
Proceeds from exercise of stock options	6,100			-,		
Proceeds from exercise of warrants	4,314,	588		7,871		
Payments on Convertible Debentures	(2,878		)	,,0,1		
Proceeds from Convertible Debentures, net of cost	7,966,		,	16,20	3 713	
Payments on notes and leases	(677,9)		)	(250,0		)
Settlement payment	(011,)	. <u>-</u>	,	(332,5		)
Cash overdraft				(1,409		)
Net cash provided by financing activities	8,730,	734		19,28		)
Net increase / (decrease) in cash	(5,168		)	10,18		
Cash and cash equivalents, beginning of period	13,857	,	,	3,676.		
Cash and cash equivalents, beginning of period	8,689,			13,85		
Cash paid for:	0,009,	330		13,03	,,,01	
Interest	\$	13,165		\$	1,247	
Income taxes	\$ \$	13,103		\$	1,27/	
income taxes	Ф			Ф		

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

#### Supplemental schedule of non-cash financing activities:

#### During the year ended December 31, 2005:

Approximately 105,000 Preferred Units, valued at \$89,400, were issued in partial settlement of accounts payable.

Approximately 616,000 shares of common stock, and 306,000 common stock purchase warrants, were issued upon conversion of \$500,000 of notes payable and approximately \$24,000 of accrued interest.

Approximately 469,000 shares of common stock, and 234,000 common stock purchase warrants, valued at an aggregate of approximately \$399,000, were issued in consideration of services related to the Preferred Unit Offering.

Sale of preferred units for cash net of costs of offering of approximately \$576,000 included approximately \$379,000 of non cash charges related primarily to Black Scholes values of warrants granted in connection with the financing.

A note for \$150,000 was issued as a part of a settlement of a note payable of \$339,000 and related accrued interest of \$53,675.

Warrants to purchase 422,727 shares of common stock at \$2.20 per share were issued in September 2005 related to the settlement of ACT Group matters.

9,411,778 shares of preferred stock converted to 9,411,778 shares of common stock in the Merger.

Approximately 350,000 shares of common stock were retired, and net intercompany amounts of approximately \$600,000 due to ACT Group, Inc were extinguished, in final settlement of litigation between ACT Group, Inc and third parties.

Approximately 195,000 shares of common stock were issued in settlement of accounts payable of approximately \$1,428,000.

Approximately \$195,000 of fixed assets were acquired through a financing arrangement with the Company s landlord.

Approximately \$27,700,000 of warrant derivatives were reclassified from equity to liabilities.

Approximately 2,800 shares of common stock were issued to a director as compensation for board fees.

Convertible debentures with a principal face of \$384,500 were converted into 167,174 shares of common stock at \$2.30 per share.

#### During the year ended December 31, 2006:

The Company issued approximately 5,657,000 shares of common stock in redemption of convertible debentures with a face value of approximately \$4,547,000.

The Company issued approximately 1,318,000 shares of common stock in conversion of convertible debentures with a face value of approximately \$3,852,000.

The Company issued approximately 163,000 shares of common stock in payment of license fees valued at approximately \$239,000.

The Company issued approximately 780,000 shares of common stock to employees as compensation of approximately \$218,000.

The Company issued approximately 44,000 shares of common stock in payment of board fees of approximately \$20,000.

The Company eliminated a derivative liability of \$6,630,000 upon exercise of warrants.

The Company issued approximately 3,284,000 shares of common stock in payment of a note valued at approximately \$2,616,000.

The Company issued to a broker-dealer warrants to purchase approximately 4,576,000 shares of common stock initially valued at \$3,608,000.

#### ADVANCED CELL TECHNOLOGY, INC. AND SUBSIDIARY

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### **DECEMBER 31, 2006**

#### 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 stem cell technology in the emerging fields of regenerative medicine and stem cell therapy. 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 consolidated financial statements, the Company has losses from operations, negative cash flows from operations, a substantial stockholders—deficit and current liabilities exceed current assets. These matters raise substantial doubt about the Company—s ability to continue as a going concern and fund cash requirements for operations through March 15, 2008. As more fully described in Note 5—Convertible Debentures—2006 and Note 7—Warrant Derivatives, the Company—was able to raise cash in the quarter ended September 30, 2006. 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.

During 2006, management has taken or has made plans to take the following steps that it believes will be sufficient to provide the Company with the ability to continue in existence:

- As described more fully in Note 5 Convertible Debentures 2006, the Company was able to raise cash during the year from an additional investment by 2005 convertible debenture holders.
- As described more fully in Note 7 Warrant Derivatives, the Company raised cash during the year from the repricing and exercise of warrants issued to 2005 convertible debenture holders.
- 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 of products which will ultimately generate revenues. While the amount or timing of such revenues can not be determined, Management believes that focused development will ultimately provide a quicker path to revenues, and an increased likelihood of raising additional financing.

#### 2. 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 and to the rules and regulations of the Securities and Exchange Commission for form 10-KSB.

*Principles of Consolidation The* accounts of Holdings and ACT are included in the accompanying consolidated financial statements for the period from January 1, 2005 to November 18, 2005, when the shareholders approved the roll-up merger to combine the two companies. During the period from January 1, 2005 to November 18, 2005, all intercompany balances and transactions were eliminated in consolidation.

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, our management has estimated variables used to calculate the Black Scholes and binomial lattice model calculations used to value derivative instruments discussed below under Valuation of Derivative Instruments . In addition, management has estimated the expected economic life and value of our licensed technology, our net operating loss for tax purposes, share-based payments to compensation to employees, directors, consultants and investment banks, the useful lives of our fixed assets and our allowance for bad debts. 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 have 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. We maintain our cash in bank deposit accounts, which at times, may exceed federally insured limits. We have not experienced any losses related to this concentration of risk.

Accounts Receivable We periodically assess our accounts receivable for collectibility on a specific identification basis. If collectibility of an account becomes unlikely, we record an allowance for that doubtful account. Once we have exhausted efforts to collect, we write off the account receivable against the allowance we have already created. We do not require collateral for our trade accounts receivable.

Equipment We record our equipment at historical cost. We expense maintenance and repairs as incurred. Depreciation is provided for on the straight-line method over three to six years. Upon disposition of 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.

**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 We follow 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, 2006 and 2005, no impairment loss was recognized.

*Fair Value of Financial Instruments For* certain of our financial instruments, including accounts receivable, account payable, accrued expenses, interest payable, bank overdraft, advances payable and notes payable, the carrying amounts approximate fair value due to their relatively short maturities.

Valuation of Derivative Instruments 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. We applied the accounting proscribed in FAS 155 to account for the 2006 Convertible Debentures described below in Note 5 Convertible Debentures 2006. In determining the appropriate fair value, the Company uses a variety of valuation techniques including Black Scholes models, Binomial Option Pricing models, Standard Put Option Binomial models and net present value of certain penalty amounts. 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 derivatives are valued using Black Scholes models.

Revenue Recognition Our 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. 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 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 are not capitalizable. Our 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.

*Stock Based Compensation At* December 31, 2006, we had two stock-based employee compensation plans, which are described more fully in Note 11 Stock Based Compensation.

Prior to the January 1, 2006 adoption of the FAS No. 123(R), Share-Based Payment, the Company accounted for stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board (APB) Opinion No. 25, Accounting for Stock Issued to Employees, and related interpretations. Because the stock option grant price equaled the market price on the date of grant, no compensation expense was recognized by the Company for stock-based compensation. As permitted by SFAS No. 123, Accounting for Stock-Based Compensation (SFAS 123) stock-based compensation was included as a pro forma disclosure in the notes to the consolidated financial statements.

Effective January 1, 2006, the Company adopted the fair value recognition provisions of SFAS 123R, using the modified prospective transition method. Under this transition method, stock-based compensation expense is recognized in the consolidated financial statements for granted, modified or settled stock options based on estimated fair values. Results for prior periods have not been restated, as provided for under the modified prospective transition method.

Prior to the adoption of SFAS 123R, the Company presented all tax benefits resulting from the exercise of stock options as operating cash inflows in the consolidated statements of cash flows, in accordance with the provisions of the Emerging Issues Task Force (EITF) Issue No. 00-15, Classification in the Statement of Cash Flows of the Income Tax Benefit Received by a Company upon Exercise of a Nonqualified Employee Stock Option. SFAS 123R requires the benefits of tax deductions in excess of the compensation cost recognized for those options to be classified as financing cash inflows rather than operating cash inflows, on a prospective basis. The impact of this change was not material to the Company.

Net Loss Per Share We use FAS No. 128, Earnings Per Share for calculating the basic and diluted loss per share. We compute basic loss per share by dividing net loss and net loss attributable to common shareholders by the weighted average number of common shares outstanding. Diluted loss per share is computed similar to basic loss per share except that the denominator is increased to include the number of additional common shares that would have been outstanding if the potential shares had been issued and if the additional shares were dilutive. Common equivalent shares are excluded from the computation of net loss per share if their effect is anti-dilutive.

For the twelve months ended December 31, 2006, 76,941,797 potentially dilutive shares were excluded from the shares used to calculate diluted earnings per share as their inclusion would reduce net loss per share. There were 40,104,105 potentially dilutive shares at December 31, 2005.

Concentrations and Other Risks Currently, the Company s revenues and accounts receivable are concentrated on one customer. There is also a geographic concentration of the Company s primary activities in Northern California and Massachusetts. Other risks include the uncertainty of the regulatory environment and the effect of future regulations on the Company s business activities. As we are a biotechnology research and development company, there is also the attendant risk that someone could commence legal proceedings over our discoveries. Acts of God could also adversely affect our business.

#### Recent Accounting Pronouncements

On February 15, 2007, the Financial Accounting Standards Board, or FASB, issued FAS No. 159, The Fair Value Option for Financial Assets and Liabilities Including an Amendment of FAS 115. This standard permits an entity to choose to measure many financial instruments and certain other items at fair value. This option is available to all entities. Most of the provisions in FAS 159 are elective; however, an amendment to FAS 115 Accounting for Certain Investments in Debt and Equity Securities applies to all entities with available for sale or trading securities. Some requirements apply differently to entities that do not report net income. FAS 159 is effective as of the beginning of an entities first fiscal year that begins after November 15, 2007. Early adoption is permitted as of the beginning of the previous fiscal year provided that the entity makes that choice in the first 120 days of that fiscal year and also elects to apply the provisions of FAS 157 Fair Value Measurements. We will adopt FAS 159 beginning January 1, 2008 and we are currently evaluating the potential impact the adoption of this pronouncement will have on our financial statements.

In December 2006, the FASB posted FASB Staff Position, or FSP, 00-19-2, Accounting for Registration Payment Arrangements. This FSP specifies that the contingent obligation to make future payments or otherwise transfer consideration under a registration payment arrangement, whether issued as a separate agreement or included as a provision of a financial instrument or other agreement should be separately recognized and measured in accordance with FAS No. 5, Accounting for Contingencies. This FSP further clarifies that a financial instrument subject to a registration payment arrangement should be accounted for in accordance with other applicable GAAP without regard to the contingent obligation to transfer consideration pursuant to the registration payment arrangement. This FSP is effective immediately for registration payment arrangements and financial instruments subject to those arrangements that were entered into or modified subsequent to December 15, 2006. For registration payment arrangements and financial instruments subject to those arrangements that were entered into prior to December 15, 2006, the FSP is effective for fiscal years beginning after December 15, 2006, and interim periods within those fiscal years. We will adopt FSP 00-19-2 beginning January 1, 2008 and we are currently evaluating the potential impact the adoption of this pronouncement will have on our financial statements.

In September 2006, the FASB issued FAS No. 158, Employers Accounting for Defined Benefit Pension and Other Postretirement Plans. This Statement requires companies to recognize in their statement of financial position an asset for a plan s overfunded status or a liability for a plan s underfunded status and to measure a plan s assets and its obligations that determine its funded status as of the end of the company s fiscal year. Additionally, FAS 158 requires companies to recognize changes in the funded status of a defined benefit postretirement plan in the year that the changes occur and those changes will be reported in comprehensive income. We have adopted FAS 158, and there was no impact on our financial statements.

In September 2006, the Financial Accounting Standards Board, or FASB, issued FAS No. 157, *Fair Value Measurements*, or FAS 157, which provides guidance on how to measure assets and liabilities that use fair value. This Statement clarifies the principle that fair value should be based on the assumptions market participants would use when pricing an asset or liability and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. FAS 157 will apply whenever another generally accepted accounting principle requires, or permits, assets or liabilities to be measure at fair value but does not expand the use of fair value to any new circumstances. This statement will also require additional disclosures in both annual and quarterly reports. FAS 157 is effective for fiscal years beginning after November 2007, and will be adopted by us beginning January 1, 2008. We are currently evaluating the potential impact this statement may have on our financial statements, but do not believe the impact of adoption will be material.

In September 2006, the SEC staff issued Staff Accounting Bulletin, or SAB, No. 108, Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements, or SAB 108. SAB 108 provides guidance on the consideration of the effects of prior year misstatements in quantifying current year misstatements for the purpose of determining whether the current year s financial statements are materially misstated. SAB 108 is effective for fiscal years ending after November 15, 2006. We will initially apply the provisions of SAB 108 in connection with the preparation of our annual financial statements for the year ending December 31, 2006. We have evaluated the potential impact that SAB 108 may have on our financial statements and do not believe the impact of the application of this guidance will be material.

In July 2006, the FASB issued Financial Accounting Standards Board Interpretation No. 48, Accounting for Uncertainty in Income Taxes, an Interpretation of FASB Statement No. 109, Accounting for Income Taxes (FIN No. 48). This interpretation creates a single model to address uncertainty in tax positions. FIN 48 clarifies the accounting for income taxes by prescribing the minimum recognition threshold a tax position is required to meet before being recognized in the financial statements. The interpretation also provides guidance on derecognition, measurement, classification, interest and penalties, accounting in interim periods, disclosure, and transition. FIN 48 is effective for years beginning after December 15, 2006. Management of the Company is evaluating the impact of this pronouncement, but does not anticipate that it will have a significant impact on its financial statements.

In February 2006, the FASB issued FAS No. 155, Accounting for Certain Hybrid Instruments. This standard amends the guidance in FASB Statements No. 133, Accounting for Derivative Instruments and Hedging Activities, and No. 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities. Statement 155 allows financial instruments that have embedded derivatives to be accounted for as a whole (eliminating the need to bifurcate the derivative from its host) if the holder elects to account for the whole instrument on a fair value basis. The Company has adopted FAS 155 and applies it to all relevant financing transactions from the date of adoption.

In September 2005, the EITF reached a consensus on Issue 05-8, Income Tax Consequences of Issuing Convertible Debt with a Beneficial Conversion Feature. EITF Issues No. 98-5, Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios, and No. 00-27, Application of Issue No. 98-5 to Certain Convertible Instruments, provide guidance on how companies should bifurcate convertible debt issued with a beneficial conversion feature into a liability and an equity component. For income tax purposes, such an instrument is only recorded as a liability. A question has been raised as to whether a basis difference results from the issuance of convertible debt with a beneficial conversion feature and, if so, whether the basis difference is a temporary difference. We do not expect the provisions of this consensus to have a material impact on our financial position, results of operations or cash flows.

In September 2005, the EITF discussed Issue 05-4, The Effect of a Liquidated Damages Clause on a Freestanding Instrument Subject to EITF Issue No. 00-19, Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company s Own Stock. The Effect of a Liquidated Damages Clause on a Freestanding Financial Instrument Subject to EITF Issue No. 00-19, Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company s Own Stock. Issuance of a registration rights agreement with a liquidated damages clause is common when equity instruments, stock purchase warrants, and financial instruments that are convertible into equity securities are issued. The agreement requires the issuer to use its best efforts to file a registration statement for the resale of the equity instruments or the shares of stock underlying the stock purchase warrant or convertible financial instrument and have it declared effective by the end of a specified grace period. The issuer may also be required to maintain the effectiveness of the registration statement for a period of time or pay a liquidated damage penalty to the investor each month until the registration statement is declared effective. Given the potential significance of the penalty, a question arises as to the effect, if any, this feature has on

the related financial instruments if they are subject to the scope of Issue 00-19. The company took the provisions of this issue into account in their accounting for the period.

In September 2005, the EITF reached a consensus on Issue 05-7, Accounting for Modifications to Conversion Options Embedded in Debt Securities and Related Issues. EITF Issue No. 96-19, Debtor's Accounting for a Modification or Exchange of Debt Instruments, provides guidance on whether modifications of debt result in an extinguishment of that debt. In certain situations, companies may change the terms of a conversion option as part of a debt modification, which may result in the following circumstances: (a) the change in the conversion option is terms causes the fair value of the conversion option to change but does not result in the modification meeting the condition in Issue 96-19 that would require the modification to be accounted for as an extinguishment of debt, and (b) the change in the conversion option is terms did not result in separate accounting for the conversion option under Statement 133. When both of these circumstances exist, questions have arisen regarding whether (a) the modification to the conversion option, which changes its fair value, should affect subsequent interest expense recognition related to the debt and (b) a beneficial conversion feature related to a debt modification should be recognized by the borrower if the modification increases the intrinsic value of the debt. We do not expect the provisions of this consensus to have a material impact on our financial position, results of operations or cash flows.

In June 2005, the EITF reached a consensus on Issue 05-2, The Meaning of Conventional Convertible Debt Instrument in EITF Issue 00-19. Paragraph 4 of Issue 00-19 states that the requirements of paragraphs 12-32 of this issue do not apply if the hybrid contract is a conventional convertible debt instrument in which the holder may only realize the value of the conversion option by exercising the option and receiving the entire proceeds in a fixed number of shares or the equivalent amount of cash (at the discretion of the issuer). The term conventional convertible debt instrument is not defined in Issue 00-19 and, as a result, questions have arisen regarding when a convertible debt instrument should be considered conventional for purposes of Issue 00-19. A question has also arisen related to whether conventional convertible preferred stock should be treated similar to conventional convertible debt. We do not expect the provisions of this consensus to have a material impact on our financial position, results of operations or cash flows.

In June 2005, the EITF reached a consensus on Issue 05-6, Determining the Amortization Period for Leasehold Improvements, which requires that leasehold improvements acquired in a business combination or purchased subsequent to the inception of a lease be amortized over the lesser of the useful life of the assets or a term that includes renewals that are reasonably assured at the date of the business combination or purchase. EITF 05-6 is effective for periods beginning after July 1, 2005. We do not expect the provisions of this consensus to have a material impact on our financial position, results of operations or cash flows.

In March 2005, the FASB issued FASB Interpretation No. 47, Accounting for Conditional Asset Retirement Obligations (FIN 47). FIN 47 provides guidance relating to the identification of and financial reporting for legal obligations to perform an asset retirement activity. The Interpretation requires recognition of a liability for the fair value of a conditional asset retirement obligation when incurred if the liability s fair value can be reasonably estimated. FIN 47 also defines when an entity would have sufficient information to reasonably estimate the fair value of an asset retirement obligation. The provision is effective no later than the end of fiscal years ending after December 15, 2005. The Company adopted FIN 47 beginning the first quarter of fiscal year 2006 and does not believe the adoption will have a material impact on its consolidated financial position or results of operations or cash flows.

In May 2005, the FASB issued FAS No. 154, Accounting Changes and Error Corrections a replacement of APB Opinion No. 20 and FAB Statement No. 3 . FAS No. 154 requires retrospective application to prior periods financial statements of changes in accounting principle, unless it is

impracticable to determine either the period-specific effects or the cumulative effect of the change. FAS No. 154 also requires that retrospective application of a change in accounting principle be limited to the direct effects of the change. Indirect effects of a change in accounting principle, such as a change in nondiscretionary profit-sharing payments resulting from an accounting change, should be recognized in the period of the accounting change. FAS No. 154 also requires that a change in depreciation, amortization or depletion method for long-lived, non-financial assets be accounted for as a change in accounting estimate effected by a change in accounting principle. FAS No. 154 is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005. Early adoption is permitted for accounting changes and corrections of errors made in fiscal years beginning after the date this Statement is issued. Management does not expect the implementation of this new standard to have a material impact on our financial position, results of operations and cash flows.

In March 2005, the SEC released Staff Accounting Bulletin No. 107, Share-Based Payment (SAB 107), which provides interpretive guidance related to the interaction between FAS 123(R) and certain SEC rules and regulations. It also provides the SEC staff s views regarding valuation of share-based payment arrangements. In April 2005, the SEC amended the compliance dates for FAS 123(R), to allow companies to implement the standard at the beginning of their next fiscal year, instead of the next reporting period beginning after June 15, 2005. Management is currently evaluating the impact SAB 107 will have on our consolidated financial statements.

#### 3. DEFERRED ROYALTY FEES

Deferred royalty fees represent cash fees and stock based compensation paid by the Company for certain licenses that have been capitalized. Such licenses are utilized in connection with the Company s operations, and are also sublicensed to third parties.

The following table summarizes the annual amounts of these fees that are amortized to cost of revenue to appropriately match both sublicense fee income and the period in which the technology is utilized.

Amortization in 2007	\$	270,474
Amortization in 2008	270,	474
Amortization in 2009	270,	474
Amortization in 2010	270,	474
Amortization in 2011 and beyond	206,	199
Total Deferred Royalty Fees	1,28	8,095
Less current portion	(225	(475)
Long Term Deferred Royalty Fees	\$	1,062,620

#### 4. PROPERTY AND EQUIPMENT

Our property and equipment as of December 31, 2006 is as follows:

Machinery and equipment	\$ 1,625,624
Computers and office equipment	367,680
Leasehold improvements	124,902
Furniture and fixtures	76,201
Total property and equipment	2,194,407
Accumulated depreciation	(1,112,727)
Property and equipment, net	\$ 1,081,680

Depreciation expense amounted to \$290,536 and \$107,388 during the twelve months ended December 31, 2006 and 2005, respectively. Accumulated depreciation at December 31, 2006 includes approximately \$98,000 related to capital leases with a net book value of approximately \$239,000.

#### 5. CONVERTIBLE DEBENTURES 2006

On September 6, 2006, we 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% of the principal amount. In connection with the closing of the sale of the debentures, we received gross proceeds of \$8,750,000. These convertible debentures were issued in connection with certain additional investment rights granted in connection with the convertible debentures issued in 2005, and described more fully in Note 6 Convertible Debentures 2005. The convertible debentures are convertible at the option of the holders into 38,129,340 shares of Common Stock at a fixed conversion price of \$0.288 per share, subject to anti-dilution and other customary adjustments. In connection with the Securities Purchase Agreement, we also issued warrants to purchase an aggregate of 19,064,670 shares of our Common Stock. The term of the warrants is five years and the exercise price is \$0.3168 per share, subject to anti-dilution and other customary adjustments. The investors have contractually agreed to restrict their ability to convert the convertible debentures, exercise the warrants and receive shares of our Common Stock such that the number of shares of our Common Stock held by them and their affiliates after such conversion or exercise does not exceed 4.99% of our then issued and outstanding shares of our Common Stock.

The agreements entered into provide that we will pay certain cash amounts as liquidated damages in the event that the Company does not maintain an effective registration statement covering the shares issuable under the debentures and the warrants, or if the Company fails to timely execute stock issuances.

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 cash, or convert the amount due into common stock at the lesser of \$0.288 per share or 85% of the prior ten days—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.

These agreements, as well as the 2005 Convertible Debentures (See Note 6) include certain restrictive covenants including a restriction on incurring additional indebtedness, or liens, a restriction on repurchasing shares and a restriction on paying dividends.

The agreements included a number of other embedded derivative instruments, and the Company has applied the provisions of FAS 155 Accounting for Certain Hybrid Financial Instruments , to record the fair values of the convertible debentures, and related derivatives, as of September 6, 2006, the date of issuance. The fair values of the debentures and related derivative instruments were valued using a combination of Binomial and Black-Scholes models, resulting in an initial fair value of approximately \$22,200,000. The effects of interactions between embedded derivatives are calculated and accounted for in arriving at the overall fair value of the financial instruments. The excess of the fair value over the transaction price of the Convertible Debentures was recorded through the results of operations as a debit of approximately \$11,200,000 to Charges Related to Issuance of Convertible Debentures.

The 2006 Convertible Debentures and related derivatives outstanding at December 31, 2006 were again valued at fair value using a combination of Binomial and Black Scholes models, resulting in a decrease in the fair value of the liability of approximately \$1,900,000, as a result of a decline in the Company s stock price and the conversion of approximately \$156,000 of the note, which was recorded through the results of operations as a credit to adjustments to fair value of derivatives.

In connection with this financing, we 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. The initial fair value of the warrant was estimated at approximately \$3,600,000 using the Black Scholes pricing model. The assumptions used in the Black Scholes model are as follows: (1) dividend yield of 0%, (2) expected volatility of 176%, (3) risk-free interest rate of 4.81%, and (4) expected life of 5 years. Cash fees paid, and the initial fair value of the warrant, have been capitalized as debt issuance costs and are being amortized over 36 months using the effective interest rate method.

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

2006 Convertible debentures at fair value	\$ 18,240,590	
Warrant derivative discount	(3,121,013	)
Original issue discount	(1,881,101	)
Net convertible debentures	13,238,476	
Less current portion	(3,971,543	)
2006 Convertible debentures and embedded derivatives-long term	\$ 9,266,933	

In the twelve months ended December 31, 2006 debentures with a book value of \$156,875 were converted into 544,705 shares at \$0.288 per share. These conversions resulted in an increase to stockholders—equity of approximately \$1,356,000. As a result of these conversions, approximately \$79,000 of unamortized discounts related to amounts converted was charged to interest expense.

#### 6. CONVERTIBLE DEBENTURES 2005

On September 15, 2005, we 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% of the principal value. In connection with the closing of the sale of the debentures, we received gross proceeds of \$17,750,000. The convertible debentures are convertible at the option of the holders into 9,685,326 shares of Common Stock at a fixed conversion price of \$2.30 per share, subject to anti-dilution and other customary adjustments. In connection with the Securities Purchase Agreement, we also issued warrants to purchase an aggregate of 4,842,663 shares of our Common Stock. The term of the warrants is five years and the exercise price is \$2.53 per share, subject to anti-dilution and other customary adjustments. 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 our Common Stock such that the number of shares of our Common Stock held by them and their affiliates after such conversion or exercise does not exceed 4.99% of our then issued and outstanding shares of our Common Stock.

The Securities Purchase Agreement provides for additional investment in debentures under certain conditions. If within six months of the effective date of the Registration Statement related to registration of shares underlying the initial issuance, October 2005, the Company satisfies certain conditions set forth in the Securities Purchase Agreement, including listing of the Company on AMEX or NASDAQ Capital Markets, stock trading price in excess of conversion price, and achievement of minimum trading volumes, the Company can require the Purchasers to purchase at a second closing \$11,138,125 principal amount of

additional debentures for a discounted purchase price of \$8,875,000. To the extent the Company has not exercised this right within the six month period, the convertible debenture holders have the right to purchase additional debentures, up to their pro rata share, less any shares required to be purchased by the Company. Twelve months following the effective date of the registration statement, any debentures not yet purchased shall be available to investors to purchase in excess of their individual pro rata share. Additional debentures issued pursuant to the agreement will have a conversion price equal to the lesser of \$2.30 per share or the five day average of closing prices immediately prior to exercise of the right to additional investment of the debentures. Warrants issued pursuant to the additional investment will have an exercise price equal to the lesser of \$2.53 or 110% of the conversion price. Other terms and conditions related to additional debentures issued will be the same as those specified for the debentures sold at the initial closing.

The agreements entered into provide that we will pay certain cash amounts as liquidated damages in the event that the Company does not maintain an effective registration statement, or if we fail to timely execute stock trading activity. In addition, the agreements provide that the Company shall meet other milestones, including settlement of ACT Group litigation, and liquidation of ACT Group, as described in Note 12, formation of a majority independent Board of Directors, and merger of the Company and ACT, substantially all of which have been satisfied.

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, we are required to either repay 1/30 of the outstanding balance owed in cash, or convert the amount due into common stock at the lesser of \$2.30 per share or 85% of the prior ten days average closing stock price, immediately preceding the redemption. The agreements also provide that we can force conversion of outstanding amounts owed under the debentures into common stock, if the Company has met conditions and milestones identified above, and, additionally, has a stock price for 20 consecutive trading days that exceeds \$4.60 per share.

Of the total proceeds from the issuance of the debentures, \$5,747,297 was initially allocated to the freestanding warrants associated with the debentures based upon the fair value of the warrants. The assumptions used in the Black Scholes model for determining the initial fair value of the warrants were as follows: (1) dividend yield of 0%; (2) expected volatility of 64%, (3) risk-free interest rate of 3.99%, and (4) expected life of 5 years. In accordance with FAS 133 Accounting for Derivative Instruments and Hedging Activities , EITF 00-19 Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in a Company s Own Stock and EITF 05-04 The Effect of a Liquidated Damages Clause on a Freestanding Financial Instrument Subject to EITF Issue No. 00-19 , the amounts allocated to the warrant represent a derivative liability that has been recorded in the accompanying balance sheet.

The agreement included a number of other embedded derivative instruments that required bifurcation and valuation in accordance with the requirements of FAS 133, EITF 05-04 and related accounting literature. The effects of interactions between embedded derivatives are calculated and accounted for in arriving at the overall fair value of the financial instruments. The following summarizes the fair values of embedded derivatives at the transaction date of September 15, 2005 and December 31, 2006, followed by a description of the valuation methodology utilized to determine fair values:

Embedded Derivative Liability (Asset)	Initial Fair value September 15, 2005	Fair value December 31, 2006
Conversion Feature	\$ 7,317,206	\$ 1,101,414
Anti-dilution protection	1,585,255	2,107,767
Default provisions	96,067	46,692
Right to provide future financing	159,960	
Company right to force conversion	(1,561,618 )	(185,091)
	\$ 7,596,870	\$ 3.070.782

The fair value of the conversion feature derivative was estimated as an American call option using the binomial option pricing model with the following inputs: (1) closing stock price as of the valuation date of \$2.20 at September 15, 2005 and \$0.58 at December 31, 2006 (2) exercise price equal to \$2.30 and \$0.95 conversion price at September 15, 2006 and December 31, 2006, respectively (3) volatility based upon the Company s stock trading of 64% at September 15, 2005 and 162% at December 31, 2006 (4) Treasury note rates with terms commensurate with the remaining term of the Notes of 3.9% at September 15, 2005 and 4.82% at December 31, 2006 and (5) duration of the note as an amortizing debenture of approximately 1.7 years at September 15, 2005 and 0.68 years at December 31, 2006 based upon present values.

The fair value of the derivative for anti-dilution protection was estimated using a standard put option binomial model, adjusted for the probability of subsequent financing at prices below the principal s conversion option with the following inputs: (1) closing stock price as of the valuation date of \$2.20 at September 15, 2005 and \$0.58 at December 31, 2006 (2) exercise price equal to the \$2.30 conversion price (3) volatility based upon the Company s stock trading of 64% at September 15, 2005 and 162% at December 31, 2006 (4) Treasury note rates with terms commensurate with the remaining term of the Notes of 3.9% and (5) duration of the note as an amortizing debenture of approximately 1.7 years at September 15, 2005 and 0.68 years at December 31, 2006 based upon present values.

#### Reduction of Exercise Price

On August 24, 2006, the Company s Board of Directors agreed to reduce the exercise price of the warrants issued in connection with the 2005 debentures from \$2.53 per share to \$0.95 per share for approximately three days. As a result of this repricing, warrant holders with an aggregate of 4,541,672 warrants exercised their rights generating approximately \$4,315,000 of cash proceeds. Warrant holders who exercised their warrants were issued replacement warrants to purchase an equivalent number of shares at an exercise price of \$1.60 per share. Warrant holders who did not exercise their warrants had the conversion price of their convertible debentures reduced to \$0.95. As a result of certain anti-dilution protection in the original warrant agreement, certain of the warrant holders who did not exercise their warrants received anti-dilution protection and had the number of shares covered under the warrant agreement increased to 2,135,615, and the exercise price reduced to \$0.95 per share. One warrant holder waived the right to reprice their warrant for \$2.53 to \$0.95 and did not exercise all of their warrants. Their remaining warrants on an aggregate of 581,119 common shares remain outstanding at an exercise price of \$2.53 per share.

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 a portion 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. EITF 05-7 states that if the change in the cash flows of the debt instrument plus the change in the fair value of the conversion derivative as a result of the change is greater than 10%, the change should be treated as significant and the debt is considered extinguished. The Company has concluded that the change in conversion price from \$2.30 to \$0.95 of a portion of the outstanding Debenture does not constitute an extinguishment of that debt.

The fair value of the derivative for contractual default provisions was determined by taking the monthly amortization schedule, and multiplying the result by the contractual penalty of 120%. The present value of this penalty was then adjusted by the estimated probability of default for each valuation date.

The fair value of the derivative for the investors option to provide future financing was determined using a Black-Scholes Option Pricing Model with the following inputs: (1) The stock and exercise price was based on the maximum amount of additional investment of \$8,875,000 (2) Volatility of 2% was based on the historical volatility of government and high yield bond indices (3) Risk free rate of 3.9% was based on Treasury notes and (4) time to maturity was based upon the six month option period. This option expired in September 2006 and no value has been attached to it at December 31, 2006.

The fair value of the derivative asset related to the Company s right to force conversion was based upon a binomial option pricing model with the following inputs: (1) closing stock price at the valuation dates of \$2.20 at September 15, 2005 and \$0.58 at December 31, 2006 (2) exercise price of \$4.60 per share which is required for the forced conversion (3) volatility based upon the Company s stock trading of 64% at September 15, 2005 and 162% at December 31, 2006 (4) Treasury note rate with terms commensurate with the remaining term of the Notes of 3.9% and (5) duration of the note as an amortizing debenture of approximately 1.7 years at September 15, 2005 and 0.68 years at December 31, 2006 based upon present values.

During the year ended December 31, 2006, a decrease in the fair value of the embedded derivative amounts of approximately \$9,073,000 was recorded through results of operations as adjustment to fair value of derivatives.

During the year ended December 31, 2006, the Company recorded approximately \$11,272,108 as Interest Expense for amortization of discounts for original issue discount, discount for warrant derivative, and other embedded derivatives identified above.

In connection with this financing, we paid cash fees to a broker-dealer of \$1,065,000 and issued a warrant to purchase 1,162,239 shares of Common Stock at an exercise price of \$2.53 per share. The initial fair value of the warrant was estimated at approximately \$1,379,000 using the Black Scholes pricing model. The assumptions used in the Black Scholes model are as follows: (1) dividend yield of 0%; (2) expected volatility of 64%, (3) risk-free interest rate of 3.99%, and (4) expected life of 5 years. Cash fees paid, and the initial fair value of the warrant, have been capitalized as debt issuance costs and are being amortized over 36 months under the effective interest rate method. Interest expense for the year ended December 31, 2006 was approximately \$828,000.

In the year ended December 31, 2006, debentures with a face value of \$1,778,500 were converted into 773,043 shares at \$2.30 per share. These conversions along with the pro rata portion of the conversion feature embedded derivative of approximately \$718,000, resulted in an increase to stockholders—equity of approximately \$2,496,000. As a result of these conversions, approximately \$980,000 of unamortized discounts related to amounts converted was charged to interest expense.

The following table summarizes the 2005 Convertible Debentures and embedded derivatives outstanding at December 31, 2006:

2005 Convertible debentures at face	\$	12,680,839			
Discounts on debentures:					
Original issue discount	(1,319	,840 )			
Conversion feature derivative	(2,174)	,391 )			
Warrant derivative	(1,707	,597 )			
Other derivatives	(83,05	9 )			
Net convertible debentures	7,395,	952			
Embedded derivatives	3,070,	782			
2005 Convertible debentures and embedded derivatives	10,466	5,734			
Less current portion (7,354.					
2005 Convertible debentures and embedded derivatives- long term	\$	3,112,029			

#### 7. WARRANT DERIVATIVES

As described more fully in Note 6 Convertible Debentures 2005, the provisions of our convertible debenture financing completed in September 2005 permit the Company to make its monthly redemption in shares rather than cash upon satisfaction of certain conditions. Under the terms of the debenture agreement, the price per share is variable dependent upon the actual closing price of the Company s common stock. Accordingly, the total number of shares to retire outstanding principal is variable and the Company can not be assured that there are adequate authorized shares to settle all contractual obligations under the debenture agreement, and other option and warrant agreements outstanding.

In accordance with the provisions of EITF 00-19, Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in a Company s Own Stock the Company has reviewed all instruments previously recorded as permanent equity under EITF 00-19 which are described in detail in Note 10 Stockholders Equity Transactions. As of September 15, 2005, the closing date of the convertible debenture financing, a \$25,600,000 increase in the fair value of instruments previously recorded as permanent equity with a value of zero was recorded based upon fair values computed under a Black Scholes model with the following assumptions: (1) dividend yield of 0%, (2) expected volatility of 64%, (3) risk-free interest rate of approximately 3.90%, and (4) expected life and exercise prices consistent with each individual instrument.

The accumulated fair value of these and other instruments at September 15, 2005 of approximately \$27,700,000, after the increase to fair value described above, was reclassified from equity to Warrant Derivative liability in accordance with the requirements of EITF 00-19.

At December 31, 2006, the fair value of each instrument was again computed under a Black Scholes model with the following assumptions: (1) dividend yield of 0%, (2) expected volatility of 162%, (3) risk-free interest rate ranging from approximately 4.70% to 5.10% and (4) expected life and exercise prices consistent with each individual instrument. These calculations resulted in an aggregate value of derivative instruments of approximately \$15,252,000. As a result, for the twelve months ended December 31, 2006 the Company recorded approximately \$15,488,000 as a credit to adjustment to fair value of derivatives.

The carrying value of the outstanding warrant derivatives issued in connection with the 2006 debentures was adjusted to the fair value at December 31, 2006 of approximately \$2,500,000. The assumptions used in the Black Scholes model for determining the initial fair value of the warrants were as follows: (1) dividend yield of 0%; (2) expected volatility of 162%, (3) risk-free interest rate of 4.57%, and (4) expected life of 4.85 years. This resulted in a decrease in the fair value of the warrant liability of approximately \$300,000 which was recorded through results of operations as a credit to adjustment to fair value of derivatives.

The carrying value of outstanding warrant derivatives from the 2005 debentures were adjusted to their fair value at August 23, 2006, the date of the reduction in conversion price of approximately \$8,000,000 based upon a Black Scholes calculation as follows: (1) dividend yield of 0%, (2) expected volatility of 167%, (3) risk-free interest rate of 4.81%, and (4) expected remaining life of 4.0 years. This resulted in an increase in the fair value of the warrant liability of approximately \$1,500,000 which was recorded through results of operations as a debit to adjustments to fair value of securities. The outstanding derivatives after the repricing and exercise were then adjusted to their fair value at August 24, 2006 of approximately \$3,500,000 based upon a Black Scholes calculation as follows: (1) dividend yield of 0%, (2) expected volatility of 167%, (3) risk-free interest rate of 4.81%, and (4) expected remaining life of 4.0 years. This resulted in an increase in the fair value of the warrant liability of approximately \$2,000,000 which was recorded through results of operations as a debit to charges related repricing and issuance of warrants.

The carrying value of outstanding warrant derivatives from the January 2005 Preferred financing were adjusted to their fair value at August 23, 2006 of approximately \$9,400,000 based upon a Black Scholes calculation as follows: (1) dividend yield of 0%, (2) expected volatility of 167%, (3) risk-free interest rate of 4.91%, and (4) expected remaining life of 1.25 years. This resulted in an increase in the fair value of the warrant liability of approximately \$6,200,000 which was recorded through results of operations as a debit to Adjustment to Fair Value of Derivatives. On August 24, 2006, the Company s Board of Directors agreed to reprice these warrants to \$0.95 per share and to extend the life of the warrants by one year. The outstanding derivatives after the repricing were then adjusted to their fair value at August 24, 2006 of approximately \$7,100,000 based upon a Black Scholes calculation as follows: (1) dividend yield of 0%, (2) expected volatility of 167%, (3) risk-free interest rate of 4.91%, and (4) expected remaining life of 2.25 years. This resulted in a decrease in the fair value of the warrant liability of approximately \$200,000 which was recorded through results of operations as a credit to charges related to repricing and issuance of warrants.

The fair value of warrants exercised at August 24, 2006 was recorded as equity in additional paid in capital. The fair value of replacement warrants issued to warrant holders who exercised their rights on August 24, 2006, which aggregated approximately \$6,900,000, was calculated based upon a Black Scholes calculation as follows: (1) dividend yield of 0%, (2) expected volatility of 167%, (3) risk-free interest rate of 4.81%, and (4) expected remaining life of 5.0 years.

The carrying value of the remaining 2005 debenture warrant derivatives at December 31, 2006 has been adjusted to reflect fair value of approximately \$1,155,000 based upon a Black Scholes calculation as follows: (1) dividend yield of 0%, (2) expected volatility of 162%, (3) risk-free interest rate of 4.70%, and (4) expected remaining life of 3.50 years. This resulted in an additional decrease in the fair value of the warrant derivative liability of approximately \$302,000 which was recorded through results of operations as a credit to adjustment to fair value of derivatives.

The carrying value of the replacement warrant derivatives at December 31, 2006 has been adjusted to reflect fair value of approximately \$2,337,000 based upon a Black Scholes calculation as follows: (1) dividend yield of 0% (2) expected volatility of 162%, (3) risk-free interest rate of 4.82%, and (4) expected remaining life of 4.75 years. This resulted in a decrease in the fair value of the warrant derivative liability of approximately \$574,000 which was recorded as a credit to adjustment to fair value of derivatives in the results of operations for the year ended December 31, 2006.

The carrying value of the January 2005 financing warrant derivatives at December 31, 2006 have been adjusted to reflect fair value of approximately \$2,116,000 based upon a Black Scholes calculation as follows: (1) dividend yield of 0%, (2) expected volatility of 162%, (3) risk-free interest rate of 4.82%, and (4) expected remaining life of 2.00 years. This resulted in an additional decrease in the fair value of the warrant derivative liability of approximately \$725,000 which was recorded through results of operations as a credit to Adjustment to Fair Value of Derivatives.

The carrying value of the broker dealer warrant derivatives at December 31, 2006 have been adjusted to reflect fair value of approximately \$2,520,000 based upon a Black Scholes calculation as follows: (1) dividend yield of 0%, (2) expected volatility of 162%, (3) risk-free interest rate of 4.70%, and (4) expected remaining life of 4.75 years. This resulted in a decrease in the fair value of the warrant derivative liability of approximately \$1,537,000 which was recorded through results of operations as a credit to 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 in the year ended December 31, 2006. The table summarizes by category of derivative liability the impact from market changes during the quarter, and the impact of additional investments.

	Impact of Additional Investment 9.6.06	Market Fair Value Adjustment	Total Fair Value Adjustment
PIPE Hybrid instrument September 2006	\$	\$ 3,090,501	\$ 3,090,501
Embedded PIPE derivatives September 2005	18,281	9,055,162	9,073,443
Embedded derivatives NP Other	128,216	196,501	324,717
Warrants PIPE September 2005		(50,603	) (50,603 )
Other Warrant derivatives	(2,213,326)	17,751,661	15,538,335
	\$ (2.066.829)	\$ 30.043.222	\$ 27,976,393

#### 8. NOTES PAYABLE OTHER

On July 8, 2003, we issued a promissory note with a face amount of \$272,108 to a law firm as a payment of fees due them. The note bears interest at a rate of 5% per year. The note is payable in monthly installments of \$25,000, including interest. The note matured on October 1, 2003. We made payments through January 2004. At December 31, 2006 there is a remaining principal balance of \$170,249, as well as accrued interest of \$10,833 and accrued late fees of \$65,000, included in accrued interest.

#### 9. RECLASSIFICATION OF EQUITY TRANSACTIONS

As described more fully in Note 6 Convertible Debentures 2005, the provisions of our convertible debenture financing completed in September 2005 permit the Company to make its monthly redemption in shares rather than cash upon satisfaction of certain conditions. Under the terms of the debenture agreement, the price per share is variable dependent upon the actual closing price of the Company s common stock. Accordingly, the total number of shares to retire outstanding principal is variable and the Company can not be assured that there are adequate authorized shares to settle all contractual obligations under the debenture agreement, and other option and warrant agreements outstanding.

Accordingly, in accordance with the provisions of EITF 00-19, Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in a Company s Own Stock the Company has reviewed all instruments previously recorded as permanent equity under EITF 00-19 which are described in detail in Note 10 Stockholders Equity Transactions. As of September 15, 2005, the closing date of the convertible debenture financing, a \$25,600,000 increase in the fair value of instruments previously recorded as permanent equity with a value of zero was recorded based upon fair values computed under a Black Scholes model with the following assumptions: (1) dividend yield of 0% (2) expected volatility of 64% (3) risk-free interest rate of approximately 3.9% and (4) expected life and exercise prices consistent with each individual instrument.

The accumulated fair value of these and other instruments at September 15, 2005 of approximately \$27,700,000, after the increase to fair value described above, was reclassified from equity to Warrant Derivative liability in accordance with the requirements of EITF 00-19.

At December 31, 2005 the fair value of each instrument was again computed under a Black Scholes model with the following assumptions: (1) dividend yield of 0% (2) expected volatility of 74% (3) risk-free interest rate of approximately 4.4% and (4) expected life and exercise prices consistent with each individual instrument. These calculations resulted in an aggregate value of derivative instruments at December 31, 2005 of approximately \$24,600,000. As a result, for the year ended December 31, 2005 the Company recorded approximately \$3,100,000 as a credit to Adjustment to Fair Value of Derivatives. As more fully described above in Note 7 Warrant derivatives, we continue to adjust the fair value of these instruments and the effects are recognized as shown in Note 7.

# 10. STOCKHOLDERS EQUITY TRANSACTIONS

We are authorized to issue two classes of capital stock, to be designated, respectively, Preferred Stock and Common Stock. As of December 31, 2006, the total number of shares of Preferred Stock we are authorized to issue is 50,000,000, par value \$0.001 per share. As of December 31, 2006, the total number of shares of Common Stock we are authorized to issue is 500,000,000, par value \$0.001 per share. We had no Preferred Stock outstanding as of December 31, 2006. We had 39,318,070 shares of Common Stock outstanding as of December 31, 2006.

In August 2006, the Company issued 780,000 shares of Common Stock to employees. These shares were fully vested at issuance and valued at fair market price determined as the closing market price on date of grant of \$0.28.

In August 2006, the Company issued 1,050,000 fully vested warrants to purchase common stock at \$2.54 per share with a term of three years in connection with consulting services provided during the quarter. The warrants were valued at approximately \$174,000 using the Black Scholes pricing model with the following assumptions: (1) dividend yield of 0%, (2) expected volatility of 167%, (3) risk-free interest rate of 4.80%, and (4) expected life of 3.0 years. This warrant is classified as a warrant derivative.

In July 2006, the Company issued 44,216 fully vested shares of Common Stock to Alan Shapiro in consideration for service on the Company s Board of Directors and Audit Committee. These shares were fully vested at issuance and are valued at fair market price determined as the closing market price on date of grant.

In April 2006, the Company issued 320,000 fully vested warrants to purchase common stock at \$2.54 per share with a term of five years in connection with consulting services provided during the quarter. The warrants were valued at approximately \$82,000 using the Black Scholes pricing model with the following assumptions: (1) dividend yield of 0%, (2) expected volatility of 78%, (3) risk-free interest rate of 5.10%, and (4) expected life of 5.0 years. This warrant is classified as a warrant derivative.

In March 2006, the Company issued 250,000 fully vested warrants to purchase common stock at \$2.54 per share with a term of three and a half years in connection with consulting services provided during the quarter. The warrants were valued at \$156,894, using the Black Scholes pricing model with the following assumptions: (1) dividend yield of 0%, (2) expected volatility of 74%, (3) risk-free interest rate of 4.82%, and (4) expected life of 3.5 years. This warrant is classified as a warrant derivative.

In October 2005 the Company issued 500,000 warrants to purchase common stock at \$2.53 per share in connection with consulting services provided during the quarter. The warrants have been valued at \$615,868, using the Black Scholes pricing model with the following assumptions: (1) dividend yield of 0%; (2) expected volatility of 64%, (3) risk-free interest rate of 4.23%, and (4) expected life of 5 years. At December 31, 2005 the fair value of this warrant was again computed under a Black Scholes model with the following assumptions: (1) dividend yield of 0% (2) expected volatility of 74% (3) risk-free interest rate of 4.35%, and (4) expected remaining life of approximately 4.75 years. These calculations resulted in a reduction to fair value of approximately \$42,000 recorded as Adjustment to Fair Value of Derivatives.

In October 2005 the Company issued 150,000 warrants to purchase common stock at \$2.53 per share in connection with consulting services provided during the quarter. The warrants have been valued at \$154,493, using the Black Scholes pricing model with the following assumptions: (1) dividend yield of 0%; (2) expected volatility of 64%, (3) risk-free interest rate of 4.23%, and (4) expected life of 4 years. At December 31, 2005 the fair value of this warrant was again computed under a Black Scholes model with the following assumptions: (1) dividend yield of 0% (2) expected volatility of 74% (3) risk-free interest rate of 4.37%, and (4) expected remaining life of approximately 3.9 years. These calculations resulted in a reduction to fair value of approximately \$1,000 recorded as Adjustment to Fair Value of Derivatives.

In October 2005 the Company issued 2,813 shares of common stock to a director as compensation for board fees. These shares were fully vested at issuance and are valued at fair market price determined as the closing market price on date of grant.

In November 2005 the Company issued 174,075 warrants to purchase common stock at \$2.54 per share in connection with consulting services provided during the quarter. The warrants have been valued at \$192,475, using the Black Scholes pricing model with the following assumptions: (1) dividend yield of 0%; (2) expected volatility of 76%, (3) risk-free interest rate of 4.33%, and (4) expected life of 4 years. At December 31, 2005 the fair value of this warrant was again computed under a Black Scholes model with the following assumptions: (1) dividend yield of 0% (2) expected volatility of 74% (3) risk-free interest rate of 4.37%, and (4) expected remaining life of approximately 3.9 years. These calculations resulted in a reduction to fair value of approximately \$12,000 recorded as Adjustment to Fair Value of Derivatives.

As described more fully in Note 12 ACT Group Settlement, the Company issued warrants to purchase 422,727 shares of common stock at \$2.20 per share. The warrant agreement provides for a reduction in the exercise price in the event there is a dilutive financing event. The warrant has been valued at \$469,966, using the Black Scholes pricing model with the following assumptions: (1) dividend yield of 0%; (2) expected volatility of 65%, (3) risk-free interest rate of 2.85%, and (4) expected life of 3.5 years.

In September 2005 the Company issued 83,000 warrants to purchase common stock at \$2.20 per share in connection with consulting services provided during the quarter. The warrants have been valued at \$105,907, using the Black Scholes pricing model with the following assumptions: (1) dividend yield of 0%; (2) expected volatility of 65%, (3) risk-free interest rate of 4.149%, and (4) expected life of 5 years.

In September 2005, the Company reached settlement agreements and releases with two previous legal firms that the Company owed amounts to. Pursuant to the settlement agreements, an aggregate of 195,000 shares of common stock were issued as full satisfaction of amounts owed. Shares issued pursuant to this settlement were valued at fair value based upon the closing market price of the Company s stock on the date of the settlement and the settlement resulted in the Company recording a Gain on Settlement of Debt of approximately \$966,000.

On January 31, 2005, the Company closed the Merger described in Note 1. As a result of the Merger, all of the outstanding shares of the capital stock of ACT were converted, on a pro rata basis, into approximately 18,000,000 shares of the Company s Common Stock. In addition, all outstanding options and warrants to acquire shares of the capital stock of ACT were converted into the right to receive shares

of the Company's Common Stock, and the Company has adopted the ACT stock option plans and all options granted thereunder.

On or about January 27, 2005, the Company issued 616,124 shares of its common stock and granted associated warrants to purchase 308,062 shares of common stock at a per share price of \$1.27 to five holders of \$500,000 aggregate principal amount of short-term promissory notes, plus interest of \$23,708 in exchange for and in retirement of the notes. The fair value of the warrants was estimated at \$0, 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 0%, (3) risk-free interest rate of 3.25%, and (4) expected life of 2 years.

On or about January 15, 2005, the Company issued 17,647 shares of common stock, valued at then current fair market value based upon the value of the Company s stock of \$15,000, in consideration of accounting services provided to the Company.

During the period beginning January 3, 2005 through January 31, 2005, ACT completed a preferred unit offering in which ACT sold 4,705,890 investment units to a group of accredited investors (within the meaning of Rule 501 of Regulation D) for total consideration of \$8,000,000. ACT received gross cash proceeds of \$7,910,600 and the balance of \$89,400 was for payment of non-Merger related legal fees which resulted in a gain on settlement of debt of approximately \$87,000. The completion of the offering resulted in the issuance of 9,411,788 shares of ACT s Series A Preferred Stock and associated warrants to purchase 4,705,890 shares of common stock at a per share price of \$1.27. In consideration of services rendered in connection with the preferred unit offering, ACT paid consultants to the preferred unit offering 469,247 investment units, which resulted in the issuance by the Company of 469,247 shares of Common Stock and associated warrants to purchase 234,629 shares of common stock at a per share price of \$1.27, the value of the Company s stock on the date of issue. All preferred shares issued pursuant to the preferred offering were converted into common stock prior to the Merger.

#### 11. 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, 2006 and 2005, ACT had granted 2,604,000 common share purchase options under the 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, 2005 and 2004, ACT had granted 1,301,161 common share purchase options under the plan.

On January 31, 2005, the Company s Board of Directors approved the establishment of the 2005 Stock Incentive Plan (the 2005 Plan ), 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 fist 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. 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, 2005, we had granted 8,907,835 common stock purchase options under the plan.

Pursuant to the 2005 Plan, on October 26, 2006, we granted 60,000 common stock purchase options to employees and directors. The options granted have an exercise price of \$0.75 per share, the market price of the Company s stock on the date of grant. Employee options vest monthly over a period of four years and director options were fully vested upon issue. The fair value of the options was estimated at \$23,334 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 162%, (3) risk-free interest rate of 5.11%, and (4) expected life of 4 years. The fair value was treated in accordance with FAS 123(R) and is being amortized over a period of four years. Since the Company vests options on the graded method, the fair value is amortized on a straight line basis which approximates the vesting schedule.

Pursuant to the 2005 Plan, on August 18, 2006, the term of existing common stock purchase options to an employee was changed, resulting in a remeasurement of the fair value of those options. The options granted have an exercise price of \$0.85 and \$2.20 per share, the market price of the Company s stock on the date of grant. The fair value of the options was estimated at approximately \$39,000 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 93%, (3) risk-free interest rate of 4.59%, and (4) expected life of 6 years. The fair value of this grant was recognized in full during the period as a consulting expense.

Pursuant to the 2005 Plan, on July 11, 2006, we granted 90,000 common stock purchase options to employees and directors. The options granted have an exercise price of \$0.35 per share, the market price of the Company's stock on the date of grant. Employee options vest monthly over a period of four years and director options were fully vested upon issue. The fair value of the options was estimated at \$18,128 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 172%, (3) risk-free interest rate of 5.10%, and (4) expected life of 4 years. The fair value was treated in accordance with FAS 123(R) and is being amortized over a period of four years. Since the Company vests options on the graded method, the fair value is amortized on a straight line basis which approximates the vesting schedule.

Pursuant to the 2005 Plan, on April 20, 2006, we granted 235,000 common stock purchase options to employees and directors. The options granted have an exercise price of \$1.35 per share, the market price of the Company s stock on the date of grant. Employee options vest monthly over a period of four years and director options were fully vested upon issue. The fair value of the options was estimated at \$89,343 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 78%, (3) risk-free interest rate of 5.10%, and (4) expected life of 6 years. The fair value was treated in accordance with FAS 123(R) and is being amortized over a period of four years. Since the Company vests options on the graded method, the fair value is amortized on a straight line basis which approximates the vesting schedule.

Pursuant to the 2005 Plan, on January 26, 2006, we granted 230,000 common stock purchase options to employees and directors. The options granted have an exercise price of \$2.04 per share, the market price of the Company s stock on the date of grant. Employee options vest monthly over a period of four years and director options were fully vested upon issue. The fair value of the options was estimated at \$314,328 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 74%, (3) risk-free interest rate of 4.38%, and (4) expected life of 6 years. The fair value was treated in accordance with FAS 123(R) and is being

amortized over a period of four years. Since the Company vests options on the graded method, the fair value is amortized on a straight line basis which approximates the vesting schedule.

Pursuant to the 2005 Plan, on November 16, 2005, we granted 205,000 common stock purchase options to employees. The options granted have an exercise price of \$2.11 per share, the market price of the Company s stock on the date of grant and vest over periods not exceeding 4 years. The fair value of the options was estimated at \$250,793 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 74%, (3) risk-free interest rate of 4.35%, and (4) expected life of 4 years.

Pursuant to the 2005 Plan, on November 16, 2005, we granted 10,000 common stock purchase options to consultants. The options granted have an exercise price of \$2.11 per share, the market price of the Company s stock on the date of grant and vest over periods not exceeding 2 years. The fair value of the options was estimated at \$8,035 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 65%, (3) risk-free interest rate of 4.13%, and (4) expected life of 2 years. This initial estimate of fair value will be expensed over the consulting period. In addition to this initial estimate of fair value, the Company calculates additional periodic expense based upon options which vest during the period. This amount, plus amortization of initial fair value, resulted in a total charge of \$8,489 in the twelve months ended December 31, 2005.

Pursuant to the 2005 Plan, on September 15, 2005, we granted 500,000 common stock purchase options to employees. The options granted have an exercise price of \$2.20 per share, the market price of the Company s stock on the date of grant and vest over periods not exceeding 4 years. The fair value of the options was estimated at \$418,908 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 64%, (3) risk-free interest rate of 4.15%, and (4) expected life of 4 years.

Pursuant to the 2005 Plan, on August 1, 2005, we granted 225,000 common stock purchase options to our employees. The options granted to employees have an exercise price of \$2.48 per share, the market price of the Company s stock on the date of grant and vest over periods not exceeding 4 years. The fair value of the options was estimated at \$293,760 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 65%, (3) risk-free interest rate of 4.15%, and (4) expected life of 4 years.

Pursuant to the 2005 Plan, on August 1, 2005, we granted 174,500 common stock purchase options to consultants, and 50,000 common stock purchase options to a director. The options have an exercise price of \$2.48 per share, the market price of the Company s stock on the date of grant and vest over periods not exceeding 2 years. The fair value of the options at the date of grant was estimated at \$170,162 for the consultant options and \$41,886 for the director options 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 65%, (3) risk-free interest rate of 4.13%, and (4) expected life of 2 years. This initial estimate of fair value will be expensed over the option vesting period. In addition to this initial estimate of fair value, the Company calculates additional periodic expense based upon options which vest during the period. This amount, plus amortization of initial fair value, resulted in a total charge of \$95,337 in the twelve months ended December 31, 2005.

Pursuant to the 2005 Plan, on January 31, 2005, we granted 7,273,335 common stock purchase options to our employees. The options granted to employees have an exercise price of 0.85, the value of the Company s stock on the date of grant per share and vest over periods not exceeding 4 years. The fair value of the options was estimated at 0.85, 472 using the Black Scholes option pricing model. The assumptions used in the Black Scholes model are as follows: (1) dividend yield of 0.95; (2) expected volatility of 0.95, (3) risk-free interest rate of 0.25, and (4) expected life of 2 years.

Pursuant to the 2005 Plan, on January 31, 2005, we granted 535,000 common stock purchase options to consultants. The options have an exercise price of \$0.85, the value of the Company s stock on the date of grant per share and vest over periods not exceeding 4 years. The fair value of the options at the date of grant was estimated at \$28,354 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 0%, (3) risk-free interest rate of 3.25%, and (4) expected life of 2 years. This initial estimate of fair value will be expensed over the option vesting period. In addition to this initial estimate of fair value, the Company calculates additional periodic expense based upon options which vest during the period. This amount, plus amortization of initial fair value, resulted in a total charge of \$293,587 in the twelve months ended December 31, 2005.

Aggregate option activity for the 2004 Plan and 2005 Plan is as follows:

	Shares Available For Grant	Stock Options Outstanding	Price no	er share	Weighted Average Exercise Price	Weighted Average Life Remaining
Balance at December 31, 2004	208,000	3,893,161	\$	0.05 \$0.25	\$ 0.12	8.6 years
Additional shares authorized	9,000,000	•			·	·
Options granted	(7,808,335)	7,808,335	\$	0.85	\$ 1.04	9.0 years
Options granted	(1,164,500 )	1,164,500	\$	2.00 \$2.50	\$ 2.29	9.3 years
Stock awards granted	(2,813)	2,813				
Options exercised		(100,000)	\$	0.05	\$ 0.05	
Options exercised		(12,083)	\$	0.85	\$ 0.85	
Options forfeited	52,917	(52,917)	\$	0.85	\$ 0.85	
Balance at December 31, 2005	285,269	12,703,809	\$	0.05 \$2.48	\$ 0.76	8.9 years
Balance at December 31, 2005	285,269	12,703,809	\$	0.05 \$2.48	\$ 0.76	8.9 years
Additional shares authorized	1,172,035					
Options granted	(230,000)	230,000	\$	2.04	\$ 2.04	9.0 years
Options granted	(235,000)	235,000	\$	0.65	\$ 0.65	9.0 years
Options granted	(90,000)	90,000	\$	0.35	\$ 0.35	10.0 years
Options granted	(60,000)	60,000	\$	0.75	\$ 0.75	10.0 years
Options exercised		(20,000)	\$	0.85	\$ 0.85	
Options exercised		(6,000)	\$	0.85	\$ 0.85	
Options forfeited	415,833	(415,833)	\$	.85 2.20	\$ 1.50	9.0 years
Stock awards	(780,000)	780,000			\$	
Balance at December 31, 2006	478,137	13,656,976	\$	0.05 2.48	\$ 0.71	8.2 years

As of December 31, 2006 and December 31, 2005, there were 7,503,665 and 6,320,961 exercisable options outstanding at a weighted average exercise price per share of \$0.61 and \$0.57, respectively, and with a weighted average life of 8.40 years and 9.02 years respectively. During the period, 415,833 options were forfeited. Options exercised during the period had no intrinsic value. The aggregate intrinsic value of all options vested and expected to vest is approximately \$1.2 million. All fully vested options in the Company are exercisable.

Options exercised during the period had no intrinsic value. The aggregate intrinsic value of all options vested and expected to vest is approximately \$1.2 million. All fully vested options in the Company are exercisable.

The fair value of all options vested during the years ended December 2005 and 2006 was \$505,180 and \$522,516 respectively.

The following table illustrates the effect on net income and earnings per share for the period ended December 31, 2005 if the Company had applied the fair value recognition provisions of FAS 123 to options granted under the company s stock option plans in all periods presented. For purposes of this pro forma disclosure, the value of the options is estimated using a Black Scholes calculation and amortized to expense over the options vesting periods.

	For the year Ended December 31, 2005
Net loss as reported	\$ (9,393,778)
Current period expense calculated under APB 25	
Stock compensation calculated under FAS 123	(495,048 )
Pro forma net loss	\$ (9,888,826)
Basic and diluted historical loss per share	\$ (0.43)
Pro forma basic and diluted loss per share	\$ (0.45)

The above pro forma disclosure is provided for 2005 because employee stock options were not accounted for using the fair-value method during that period.

For the twelve months ended December 31, 2006, a charge of approximately \$180,000 was recorded through results of operations as Research and Development expense related to share based compensation. For the twelve months ended December 31, 2006, a charge of approximately \$169,000 was recorded through results of operations as General and Administrative expense related to share based compensation. These amounts were calculated using a pre-vesting forfeiture rate of 13%, based on historical employee turnover and forfeiture data.

A summary of the status of unvested employee stock options as of December 31, 2006 and changes during the period then ended, is presented below:

	Options	Weighted Average Grant Date Fair Value Per Share
Unvested at December 31, 2005	5,489,041	\$ 0.19
Granted	615,000	\$ 0.71
Vested	(2,271,810)	\$ 0.23
Forfeited	(415,833 )	\$ 0.51
Unvested at December 31, 2006	3,416,398	\$ 0.22

As of December 31, 2006, the total remaining unrecognized compensation cost related to unvested stock options amounted to \$920,000 which will be amortized over the weighted-average remaining requisite service period of four years.

#### 12. ACT GROUP SETTLEMENT

On September 14, 2005, we entered into a Settlement Agreement (Settlement Agreement) with Gary D. Aronson and John S. Gorton (Plaintiffs) and our majority shareholder, A.C.T. Group, Inc., a Delaware corporation that has since filed a certificate of dissolution in the state of Delaware (ACT Group), Advanced Cell, Inc., a Delaware Corporation, Michael D. West, Gunnar L. Engstrom, William M. Caldwell, IV, Anthem Venture Partners and Greg Bonfiglio (referred to collectively with the Company as the Defendants). The Settlement Agreement resolved certain disputes relating to the litigation entitled *Gary D. Aronson and John Gorton v. A.C.T. Group, Inc., Advanced Cell Technology, Inc.*,

Michael D. West, and Gunnar L. Engstrom which was pending in Commonwealth of Massachusetts Superior Court, Worcester, C.A. No. 040523B and two companion Contempt Complaints filed by the Plaintiffs against certain of the Defendants, including the Company. The Settlement Agreement extinguished in full ACT Group s obligations and indebtedness to Plaintiffs, and Plaintiffs dismissed pending claims and actions.

We analyzed the \$600,000 of convertible promissory notes payable and related warrants issued by the Company in connection with this settlement, and determined that the warrants should be recorded as free standing warrant derivative liabilities, and the conversion option and anti-dilution provisions represent embedded derivative instruments under the provisions of FAS 133. Accordingly, we separately valued these instruments and recorded discounts offsetting Notes Payable Other.

In August 2006, we repaid in full the convertible promissory notes payable. This cash payment, along with accrued interest and costs, resulted in payment in full of the outstanding notes payable balances and in a loss on extinguishment of approximately \$263,000. As a result of repaying in full the outstanding notes payable, the fair value of the embedded derivative for the conversion option of approximately \$14,000 was charged to adjustment to fair value of derivatives.

In September 2006, the Company received notice of exercise of the warrants issued as part of the Settlement Agreement noted above. In accordance with anti-dilution provisions in the warrant and the issuance of 2006 convertible debentures described in Note 5, the exercise resulted in issuance of approximately 3,200,000 shares of common stock. The warrants were adjusted to their fair value at September 5, 2006 of approximately \$185,000 based upon a Black Scholes calculation as follows: (1) dividend yield of 0%, (2) expected volatility of 175%, (3) risk-free interest rate of 4.71%, and (4) expected remaining life of 2.6 years. This resulted in an increase in the fair value of the warrant liability of approximately \$18,000 which was recorded through results of operations as a debit to Adjustment to Fair Value of Derivatives.

#### 13. COMMITMENTS AND CONTINGENCIES

We are a party to a research collaboration agreement and license agreement with the University of Massachusetts, as amended from time to time (the UMass License). Under the UMass License, we were granted certain exclusive rights to license and sublicense certain products and services invented as part of the collaborative effort. The term of the UMass License extends to the later of the expiration of the related patents currently 2021, or April 16, 2006. We are required to pay royalties ranging from 2.5% to 4.5% of net sales of licensed products and services, as defined. Minimum royalties of \$45,000 per year must be paid to UMass. For 2005 and 2004, we have paid only the minimum royalty required. Additionally, we are required to pay sublicense fees of 18% for sublicense income, as defined. We are required to spend a minimum annual amount of \$200,000 on research and development.

In May 2006 we entered into exclusive and non-exclusive sublicense agreements with a company whereby we are the licensee of certain of their technology and intellectual property for a cash payment of \$300,000. The agreement requires we pay minimum annual royalties of \$25,000 per annum for 2006, \$37,500 for 2007 and \$50,000 each year thereafter through the term of the agreement. The initial license fees paid have been capitalized and will be amortized over the life of the underlying intellectual property, estimated to be approximately ten years.

During 2004, we entered into license agreements with two parties as licensor, the terms of which provide for the initial payment of the license fee through an aggregate of six promissory notes totaling \$1,400,000. The notes mature as follows: \$333,333 on December 1, 2005; \$666,667 on December 1, 2006; and \$400,000 on June 1, 2007. There is no stated interest rate for \$1,000,000 of notes, the remaining \$400,000 bear interest at 10% per year, but only if the notes are not paid at maturity. Because of the

uncertainty of the ultimate collection of the principal amount of the notes, they have not been recorded in the financial statements and will not be recorded until their collectibility is reasonable assured.

The Company entered into a lease for office and laboratory space in Massachusetts commencing December, 2004 and expiring April, 2010 and for office space in California commencing November, 2005 and expiring May 2008. Annual minimum lease payments are as follows:

2007	568,509
2008	386,311
2009	246,146
2010	83,400
Total	1,284,366

During 2005, the Company entered into a lease for laboratory equipment commencing November 29, 2005 and expiring May 31, 2008. Annual minimum lease payments are as follows:

2007	87,964
2008	36,655
	124,619
Imputed interest	(15,054)
Net asset value	109,565
Less current portion	(77,594)
Long-term commitment under capital lease	\$ 31,971

Rent expense recorded in the financial statements for the years ended December 31, 2006 and 2005 was \$1,387,155 and \$461,155, 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.

#### 14. LEGAL PROCEEDINGS

Geron-related Proceedings

University of Massachusetts, referred to as UMass, filed a complaint on February 22, 2004 in the Superior Court (Suffolk County) for the Commonwealth of Massachusetts. A decision adverse to UMass in this litigation could have had a materially adverse effect on our business. The complaint alleged the misappropriation by the defendants of valuable inventions in the fields of animal cloning and cell reprogramming, made by the defendants at UMass and with UMass support, that are exclusively licensed to ACT by UMass. The complaint included counts for declaratory judgment, breach of contract seeking specific performance, injunctive relief and damages, intentional interference with contract and prospective contractual relations, conversion, breach of duty, and breach of the covenant of good faith and fair dealing. ACT successfully intervened in the litigation to protect its interests. In May 2006 the parties to the litigation reached a settlement agreement, and this case was dismissed during the second quarter.

University of Massachusetts and Advanced Cell Technology, Inc. v. Roslin Institute (Edinburgh), Geron Corporation and Exeter Life Sciences, Inc., U.S. District Court for the District of Columbia. We filed an

action on February 18, 2005 in the U.S. District Court for the District of Columbia. We brought this action under 35 U.S.C. 146 to reverse the decision of the Board of Patent Appeals and Interferences regarding a patent to a method of cloning non-human animals. The patent, U.S. Patent No. 5,945,577, is licensed by the University of Massachusetts exclusively to us.

University of Massachusetts and Advanced Cell Technology, Inc. v. Roslin Institute (Edinburgh), Geron Corporation and Exeter Life Sciences, Inc., U.S. District Court for the District of Columbia. We filed an action on April 7, 2005 in the U.S. District Court for the District of Columbia. We brought this action under 35 U.S.C. 146 to reverse the decision of the Board of Patent Appeals and Interferences regarding a patent to a method of creating embryonic stem cells. The patent, U.S. Patent No. 6,235,970, is licensed by the University of Massachusetts exclusively to us.

On August 30, 2006, the Company entered into a License and Settlement Agreement between the Company, UMass and Start Licensing, Inc. (Start) relating to the settlement of the patent interference actions most recently described above (Geron-Related Proceedings). The terms of the License and Settlement Agreement include an initial payment to the Company of \$500,000 and milestone payments to the Company of up to \$750,000. In addition, Start, Geron Corporation and Roslin Institute (Roslin) each agree not to sue the Company under certain patent applications owned by Roslin. In exchange, the Company and the University agreed to dismiss their appeal in the Geron-Related Proceedings with prejudice, transfer control of related University patents to Start and pay certain legal fees. Under the terms of the settlement agreement, the Company retained its rights under the University patents in the human field.

#### 15. INCOME TAXES

The Company accounts for income taxes in accordance with Statement of Financial Accounting Standards No. 109, Accounting for Income Taxes . FAS No. 109 requires the Company to provide a net deferred tax asset/liability equal to the expected future tax benefit/expense of temporary reporting differences between book and tax accounting methods and any available operating loss or tax credit carryforwards. The Company has available at December 31, 2006, operating loss carryforwards of approximately \$43,000,000, which may be applied against future taxable income and which expire in various years through 2024. At December 31, 2005, the company had operating loss carryforwards of approximately \$23,000,000. The increase in carryforwards for the year ended December 31, 2006 is approximately \$20,000,000. If certain substantial changes in the Company s ownership should occur, there will be an annual limitation on the amount of net operating loss carryforwards which can be utilized.

The amount of and ultimate realization of the benefits from the operating loss carryforwards for income tax purposes is dependent, in part, upon the tax laws in effect, the future earnings of the Company, and other future events, the effects of which cannot be determined. Because of the uncertainty surrounding the realization of the loss carryforwards, the Company has established a valuation allowance equal to the tax effect of the loss carryforwards and, therefore, no deferred tax asset has been recognized for the loss carryforwards. A reconciliation of the statutory Federal income tax rate and the effective income tax rate for the years ended December 31, 2006 and 2005 follows:

	December 31, 2006	December 31, 2005
Statutory federal income tax rate	(35)%	(35)%
State income taxes, net of federal taxes	(6 )%	(8)%
Non-deductible items	10 %	0 %
Valuation allowance	32 %	43 %
Effective income tax rate	0 %	0 %

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

	December 31, 2006	December 31, 2005	
Deferred tax assets/(liabilities)			
Net operating loss carryforwards	\$ 17,200,000	\$ 8,050,000	
Deferred interest and finance charges	40,000	51,100	
Bad debts	161,200	141,050	
Deferred tax assets, net	17,401,200	8,242,150	
Valuation allowance	(17,401,200	) (8,242,150	
Net deferred tax assets	\$	\$	

#### 16. GAIN ON SALE OF ASSET

In May 2006, the Company sold a minority interest it owned in an entity for cash proceeds of approximately \$767,000, resulting in a Gain on Sale of Asset as the Company had no asset value recorded for its investment. As part of this sale, the Company entered into a series of agreements that resolved certain legal matters.

### 17. SUBSEQUENT EVENTS

In January 2007, the Company issued 35,909 common shares to a director in payment for board fees.

In January 2007, the Company made its monthly redemptions of convertible debentures described in Note 6. The terms of the agreement provide for payment in cash, or company stock under certain circumstances. In connection with the January redemptions, the Company paid cash of approximately \$135,000 and issued approximately 1,120,000 shares of common stock and redeemed approximately \$740,000 in Notes Payable.

In February 2007, the Company made its monthly redemptions of convertible debentures described in Note 6. The terms of the 2005 Debenture Financing Amendment described below provide for payment in cash, or company stock at the Company s discretion. In connection with the February redemptions, the Company paid no cash and issued approximately 806,000 shares of common stock and redeemed approximately \$600,000 in Notes Payable.

In March 2007, the Company made its monthly redemptions of convertible debentures described in Note 6. The terms of the 2005 Debenture Financing Amendment described below provide for payment in cash, or company stock at the Company s discretion. In connection with the March redemptions, the Company paid no cash and issued approximately 744,000 shares of common stock and redeemed approximately \$521,000 in Notes Payable.

At December 31, 2006, approximately 55,000 of the shares related to the January redemption had been preliminarily issued by the transfer agent in accordance with the terms of the debenture agreement. Such shares are not reflected as issued and outstanding by the company prior to finalizing share and cash payments in connection with the redemption in January 2007.

In January 2007, the Company announced an amendment to the Company s Amortizing Convertible Debentures and Common Stock Purchase Warrants issued under the Securities Purchase Agreement dated as of September 15, 2005 ( 2005 Debenture Financing ) and to the Company s Amortizing Convertible Debentures and Common Stock Purchase Warrants issued under the Securities Purchase Agreement dated as of August 30, 2006 ( 2006 Debenture Financing ). The amendments contain the basic terms described below.

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2005 Debenture Financing Amendment. The transaction documents associated with the 2005 Debenture Financing are amended in the following material respects:

- The conversion price of the debentures has been reset to \$0.90.
- The exercise price of the warrants has been reset to \$0.95.
- The debentures have been amended to give the Company the right to pay mandatory monthly redemptions in registered shares (or shares of Common Stock eligible for immediate resale under Rule 144) or cash, in the Company s discretion.
- The Registration Rights Agreement has been amended so as to limit the number of shares of Common Stock required to be registered to an amount not in excess of the limits imposed by the Securities and Exchange Commission s application of Rule 415.

2006 Debenture Financing Amendment. The transaction documents associated with the 2006 Debenture Financing will be amended in the following respects:

- The commencement of monthly redemptions has been deferred until September 7, 2007.
- The Company has been authorized to withdraw its pending Registration Statement, subject to satisfaction of the provisions of the amended Registration Rights Agreement described immediately below.
- The Registration Rights Agreement has been amended as follows: (a) to require the filing of an initial Registration Statement by the later of the 10th trading day following the effective date of the Amendment, or January 19, 2007; (b) the number of shares of Common Stock required to be registered is limited to an amount not in excess of the limits imposed by the Securities and Exchange Commission s application of Rule 415.
- The Company has covenanted to limit cash expenditures to an amount not in excess of \$1.3 million per calendar month, subject to certain specified exceptions.

During January of 2007, the Company issued approximately 5,208,000 shares of common stock related to the conversion of \$5,048,000 of the 2005 Debentures.

On February 5, 2007, the Company entered into a certain Patent Assignment Agreement with Infigen, Inc. with respect to the acquisition of all of the intellectual property portfolio and assets owned by Infigen, Inc. The Company acquired 26 patents and patent applications in exchange for consideration with a total value of \$708,000, \$100,000 of which was paid in cash and the remaining \$608,000 was paid with the issuance of 800,000 shares of restricted common stock of the Company at a per share price equal to \$0.76 (the closing price on February 5, 2007). The intellectual property portfolio was transferred to the Company on an as is basis.

On February 5, 2007, the Company entered into a Research Services Agreement with Oregon Health & Science University (OHSU). Under the terms of the research agreement, OHSU and the Company will collaborate on an evaluation of the functionality of the Company s human embryonic derived retinal pigment epithelium (RPE) cells. The Company will pay OHSU aggregate consideration of \$345,328 in accordance with the budgets set forth in the research agreement. Fifty percent of the fees are due and payable within 30 days from execution of the research agreement and the remaining fifty percent will be payable within 120 days from the execution of the research agreement.

On February 5, 2007, we entered into an employment agreement with Pedro Huertas, M.D., Ph.D., our Chief Development Officer. Dr. Huertas was most recently Chief Strategy and Development Officer at Amicus Therapeutics Inc., where his duties included oversight of preclinical and clinical development activities, R&D and product development. He also served as acting Chief Medical Officer at

Stemcells Inc., where he designed stem cell-based therapeutics initiatives, and handled regulatory affairs, including the successful filing of an Investigational New Drug (IND) application and other interactions with the FDA. Dr. Huertas also served as Chief Medical Officer for Novazyme which was acquired and prior to that served as a Director of Strategic Development at Genzyme Corporation.

The employment agreement with Dr. Huertas provides for annual compensation of \$290,000. The agreement provides for an annual bonus as determined by our Chief Executive Officer and our Board of Directors. Dr. Huertas was awarded 1,300,000 stock options under the 2005 Stock Incentive Plan, 10% of which vested upon grant with the remainder vesting in equal monthly installments over 48 months. Dr. Huertas shall receive a monthly automobile allowance of \$1,000. In the event of a change of control of us, 50% of any unvested options held by Dr. Huertas will become vested. In the event Dr. Huertas employment is terminated without cause by us or for good reason by Dr. Huertas, he is entitled to a lump sum severance payment equal to twelve months base salary, accelerated vesting of 100% of his unvested stock options, and reimbursed cost of medical coverage for a period of twelve months. In the event Dr. Huertas is terminated without cause following a change of control, he is entitled to a lump sum severance payment equal to twelve months base salary and accelerated vesting of 100% of any unvested stock options. Dr. Huertas agreement contains non-solicitation, confidentiality and non-competition covenants. The agreement may be terminated by either party with or without cause with thirty days written notice.

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# PART II INFORMATION NOT REQUIRED IN PROSPECTUS

#### **Item 24.** Indemnification of Directors and Officers

Article Ten of our certificate of incorporation provides that, to the fullest extent permitted by the Delaware General Corporation Law, a director of the corporation shall not be liable to the corporation or its stockholders for monetary damages for breach of his or her fiduciary duty as a director. Section 102 of the Delaware General Corporation Law allows a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit.

Article Ten of our certificate of incorporation also provides that the corporation shall indemnify, in the manner and to the fullest extent permitted by the Delaware General Corporation Law, any person (or the estate of any person) who is or was a party to, or is threatened to be made a party to, any threatened, pending or completed action, suit or proceeding, by reason of the fact that such person is or was a director or officer of the corporation, or is or was serving at the request of the corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise. Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he is or is threatened to be made a party by reason of such position, if such person shall have acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal proceeding, if such person had no reasonable cause to believe his conduct was unlawful; provided that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that such indemnification is proper under the circumstances.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable.

## Item 25. Other Expenses of Issuance and Distribution

We will pay all expenses in connection with the registration and sale of our common stock. The estimated expenses of issuance and distribution are set forth below.

Type of Expense	Amount	
Registration Fees	\$	1,273
Transfer Agent Fees	\$	5,000
Costs of Printing and Engraving	\$	30,000
Legal Fees	\$	50,000
Accounting Fees	\$	15,000
Total	\$	101,273

## Item 26. Recent Sales of Unregistered Securities

In light of the merger and the complete change of business by the small business issuer following the merger, we have elected to disclose all unregistered sales of equity securities during the previous three

years. For the portion of the three-year period prior to the consummation of the merger on January 31, 2005, the disclosure set forth below relates to unregistered sales of equity securities by ACT. For the period January 31, 2005 through December 31, 2006, the disclosure set forth below relates to our unregistered sales of equity securities. The issuances of the equity securities described below were made in reliance upon the exemption from registration under Section 4(2) of the Securities Act of 1933, as amended, relating to sales by an issuer not involving a public offering, and/or pursuant to the requirements of one or more of the safe harbors provided in Regulation D under the Securities Act or, in the case of equity compensation to employees, directors and eligible consultants, Rule 701 therewith.

On September 6, 2006, in connection with the closing of the exercise of the additional investment right described in our Current Report on Form 8-K filed with the Securities and Exchange Commission on September 6, 2006, we issued to certain accredited investors an aggregate of \$10,981,250 principal amount convertible debentures with an original issue discount of 20.3187%. In connection with the closing of the issuance and sale of convertible debentures, we received gross proceeds of \$8,750,000. The convertible debentures are due and payable three years from the date of issuance, unless sooner converted into shares of our common stock. The conversion price of the debentures is \$0.288, subject to anti-dilution and other customary adjustments. In connection with the securities purchase agreement, we also issued warrants to purchase an aggregate of 19,064,670 shares of our common stock. The term of the warrants is five years and the exercise price is \$0.3168 per share, subject to anti-dilution and other customary adjustments.

On August 30, 2006, we entered into a securities purchase agreement with certain accredited investors for the issuance of an aggregate of \$10,981,250 principal amount convertible debentures with an original issue discount of 20.3187%. In connection with the closing of the sale of convertible debentures, we received gross proceeds of \$8,750,000. The convertible debentures are due and payable three years from the date of issuance, unless sooner converted into shares of our common stock. The conversion price of the debentures is \$0.288, subject to anti-dilution and other customary adjustments. In connection with the securities purchase agreement, we also issued warrants to purchase an aggregate of 19,064,670 shares of our common stock. The term of the warrants is five years and the exercise price is \$0.3168 per share, subject to anti-dilution and other customary adjustments.

On August 28, 2006, in connection with the warrant repricing transaction described above, we issued to certain 2005 Purchasers warrants to purchase an aggregate of 4,541,672 shares of our common stock. The term of the warrants is five years and the exercise price is \$1.60 per share, subject to anti-dilution and other customary adjustments.

On August 23, 2006, in connection with certain consulting services provided to us, we issued to Trilogy Capital Partners, Inc. 1,050,000 warrants to purchase shares of its common stock, of which 550,000 are immediately vested and exercisable and 500,000 will vest and become exercisable after six months.

On April 21, 2006, we issued a warrant to purchase 20,000 shares of common stock at an exercise price of \$2.54 per share to Chad Griffin in connection with consulting services provided to us by Mr. Griffin.

On April 24, 2006, we issued a warrant to purchase 300,000 shares of common stock at an exercise price of \$2.54 per share to Stephen Price in connection with consulting services provided to us by Mr. Price.

On March 23, 2006, we issued a warrant to purchase 250,000 shares of common stock at an exercise price of \$2.54 per share to MarketByte in connection with investor relation services provided to us.

On March 29, 2006, we issued 163,399 shares of our common stock to TranXenoGen, Inc. in connection with the transactions contemplated by a sublicense agreement entered into by the Company and TranXenoGen, Inc.

On November 4, 2005, we issued a warrant to purchase 174,075 shares of common stock at an exercise price of \$2.54 per share to The Investors Relations Group Inc. in connection with investor relation services provided to us.

On October 10, 2005, we issued a warrant to purchase 150,000 shares of common stock at an exercise price of \$2.53 per share to Crystal Research Associates in connection with investor relation services provided to us.

On October 5, 2005, we issued a warrant to purchase 500,000 shares of common stock at an exercise price of \$2.53 per share to Bristol Capital, LLC in connection with consulting services provided to us.

On September 18, 2005, we issued 20,000 shares of common stock to Torkildson Katz Fonseca Moore & Hetherington in settlement of accounts payable for services provided to the company on a pre-merger basis.

On September 16, 2005, we issued 175,000 shares of common stock to Pillsbury Winthrop Shaw & Pittman in settlement of accounts payable for services provided to the company on a pre-merger basis.

On September 15, 2005, we entered into a securities purchase agreement with certain accredited investors for the issuance of an aggregate of \$22,276,250 principal amount convertible debentures with an original issue discount of 20.3187%. In connection with the closing of the sale of convertible debentures, we received gross proceeds of \$17,750,000. The convertible debentures are due and payable three years from the date of issuance, unless sooner converted into shares of our common stock. The conversion price of the debentures is \$2.30, subject to anti-dilution and other customary adjustments. In connection with the securities purchase agreement, we also issued warrants to purchase an aggregate of 4,842,663 shares of our common stock. The term of the warrants is five years and the exercise price is \$2.53 per share, subject to anti-dilution and other customary adjustments.

On September 15, 2005, in connection with this financing described above, we issued a warrant to purchase 1,162,239 shares of common stock at an exercise price of \$2.53 per share, to T.R. Winston & Company, LLC.

On September 14, 2005, as part of the settlement agreement relating to the litigation entitled *Gary D. Aronson and John Gorton v. A.C.T. Group, Inc., Advanced Cell Technology, Inc., Michael D. West, and Gunnar L. Engstrom* pending in Commonwealth of Massachusetts Superior Court, Worcester, C.A. No. 040523B, we issued to Gary Aronson and John Gorton unsecured convertible promissory notes in the aggregate amount of \$600,000, bearing interest at the rate of 7.5% per annum and maturing July 1, 2006, referred to as the settlement note. The settlement note may be prepaid at any time without penalty. The holders of the settlement note have the right to convert the settlement note, in whole or in part, into our common stock at the price specified in the settlement warrants. We also issued to Aronson and Gorton warrants to purchase 422,727 shares of our common stock, preferred stock or other non-debt securities issued by us at an exercise price of \$2.20 per share of common stock or per share of common stock underlying any preferred stock or other non-debt securities.

On September 14, 2005, we issued a warrant to purchase 50,000 shares of common stock at an exercise price of \$2.20 per share to Reinaldo Diaz in connection with consulting services provided to us.

On September 14, 2005, we issued a warrant to purchase 33,000 shares of common stock at an exercise price of \$2.20 per share to William Woodward in connection with consulting services provided to us.

On January 31, 2005, our Board of Directors approved the establishment of the 2005 Stock Incentive Plan, referred to as the 2005 Plan, subject to approval of our shareholders. The Board approved stock option grants to employees and consultants totaling 7,808,335 under the 2005 Plan. These grants included 7,273,335 awarded to employees and 535,000 awarded to consultants.

On January 31, 2005, we closed the merger. We filed a Form 8-K on February 4, 2005 reporting that we had completed the merger transaction and the following issuances of unregistered securities in connection therewith. As a result of the merger, all of the outstanding shares of the capital stock of ACT were converted, on a pro rata basis, into the right to receive an aggregate of approximately 18,000,000

shares of our common stock. In addition, all outstanding options and warrants to acquire shares of the capital stock of ACT were converted into the right to receive shares of our common stock, and we have assumed the ACT 2004 Stock Option Plan and the ACT 2004 Stock Option Plan II and all options granted thereunder.

On or about January 27, 2005, ACT issued 616,124 shares of its common stock and granted associated warrants to purchase 308,062 shares of common stock at a per share price of \$1.27 to five holders of \$500,000 aggregate principal amount of short-term promissory notes, plus interest of \$23,708 in exchange for and in retirement of the notes. The issuance of the notes is described below.

On or about January 15, 2005, ACT issued 17,647 shares of common stock to Robert Scherne in consideration of accounting services provided to ACT.

During the period January 3, 2005 through January 31, 2005, ACT completed a preferred unit offering in which ACT sold 4,705,890 investment units to a group of accredited investors (within the meaning of Rule 501 of Regulation D) for total consideration of \$8,000,000. The completion of the offering resulted in the issuance of 9,411,788 shares of its Series A Preferred Stock and associated warrants to purchase 4,705,890 shares of common stock at a per share price of \$1.27. In consideration of services rendered in connection with the preferred unit offering, ACT paid consultants to the preferred unit offering 469,247 investment units, which resulted in the issuance by ACT of 469,247 shares of Series A Preferred Stock and associated warrants to purchase 234,629 shares of common stock at a per share price of \$1.27.

On December 30, 2004, we issued 1,291,615 warrants to consultants and employees with an exercise price of \$2.00 per share, and 1,833,260 cashless warrants with an exercise price of \$0.85, as reported in the our Form 8-K filed February 4, 2005. All of these warrants are exercisable for a period of 10 years, enjoy piggy-back registration rights and may not be exercised for a period of twelve months from the date of issuance.

On December 13, 2004, ACT s Board of Directors and stockholders approved the establishment of 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 committee or the Board of Directors or a committee established by the Board of Directors. As of December 31, 2004, ACT had granted 1,301,161 common stock purchase options under the plan to certain employees and consultants of ACT.

On December 13, 2004, ACT granted warrants to certain employees and consultants to purchase 1,954,000 shares of common stock at a price of \$0.25 per share in consideration for consulting services provided to ACT.

On November 30, 2004, ACT granted warrants to purchase 100,000 shares of common stock at a per share price of \$0.25 to a former executive of the company in connection with the termination of his employment contract. The warrants are exercisable on or after April 1, 2005 and lapse if unexercised on April 1, 2010.

On November 26, 2004, ACT granted to Andwell, LLC warrants to purchase 250,000 shares of common stock at a per share price of \$0.05 in connection with the early release of \$500,000 of escrowed funds from the ACT preferred unit offering escrow account. The warrants are exercisable immediately upon issuance and lapse if unexercised on November 26, 2006.

During the period August 2004 through October 2004, ACT issued promissory notes aggregating \$500,000 face value to certain accredited investors, within the meaning of Rule 501 of Regulation D, for cash proceeds of \$450,000 and the assumption of \$50,000 of debt owed by ACT Group to one of its creditors. The notes were convertible at the option of the holder into shares of ACT s capital stock sold in a subsequent financing, at an amount equal to the lowest per share selling price of shares of that stock issued in such

financing. As described above, these notes were converted into ACT common stock and warrants on January 27, 2005. As additional consideration for the purchase of the notes, ACT granted to the note holders warrants entitling them to purchase 700,000 common shares at an exercise price of \$0.05. Warrants for 300,000 shares were exercisable immediately upon issuance and expire two years from the date of issue. Warrants for 400,000 shares are exercisable on or after February 1, 2006 and expire February 1, 2008.

On August 12, 2004, ACT s Board of Directors approved the establishment of the 2004 Stock Plan, subject to approval by our stockholders on or before August 12, 2005. 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 committee or the Board of Directors or a committee established by the Board of Directors. At December 31, 2004, we had granted 2,604,000 common share purchase options under the plan.

#### Item 27. Exhibits

Please see the Exhibit Index which follows the signature page to this Registration Statement on Form SB-2 and which is incorporated by reference herein.

## Item 28. Undertakings

The undersigned registrant undertakes that it will:

- 1. File, during any period in which offers or sales are being made, a post-effective amendment to this registration statement to:
- (a) Include any prospectus required by section 10(a)(3) of the Act;
- (b) Reflect in the prospectus any facts or events which, individually or together, represent a fundamental change in the information in the registration statement;
- (c) Include any additional or changed material information on the plan of distribution.
- 2. For determining liability under the Act, treat each post-effective amendment as a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- 3. File a post-effective amendment to remove from registration any of the securities that remain unsold at the end of offering.
- 4. Insofar as indemnification for liabilities arising under the Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable.
- 5. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

#### **SIGNATURES**

In accordance with the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form SB-2 and authorized this Amendment No. 1 to Registration Statement on Form SB-2 to be signed on its behalf by the undersigned, in the City of Alameda, State of California, on April 5, 2007.

#### ADVANCED CELL TECHNOLOGY, INC.

By: /s/ WILLIAM M. CALDWELL, IV

Its: Chief Executive Officer

In accordance with the requirements of the Securities Act of 1933, this Amendment No. 1 to Registration Statement on Form SB-2 has been signed by the following persons in the capacities and on the dates indicated.

By: /s/ WILLIAM M. CALDWELL, IV April 5, 2007

Name: William M. Caldwell, IV

Title: Chief Executive Officer (Principal Executive Officer)

By: /s/ IVAN WOLKIND April 5, 2007

Name: Ivan Wolkind

Title: Principal Financial and Accounting Officer

By: \* April 5, 2007

Name: Michael D. West, Ph.D.

Title: Director

By: \* April 5, 2007

Name: Alan C. Shapiro, Ph.D.

Title: Director

By: \* April 5, 2007

Name: Erkki Ruoslahti, M.D., Ph.D.

Name: Alan G. Walton, Ph.D., D.Sc.

Title: Director

By: \* April 5, 2007

Title: Director

\*By: /s/ WILLIAM M. CALDWELL, IV

William M. Caldwell, IV

Attorney-in-Fact

#### 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).
- 3.2 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).
- 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).
- 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).
- 5.1 Opinion of Pierce Atwood LLP.\*
- 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).
- 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).
- 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).
- 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).
- 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).
- 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, as amended by First Amendment to Exclusive License Agreement (Infigen IP) dated August 25, 2005 (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).
- 10.20 Exclusive License Agreement (UMass IP) dated May 14, 2004 between ACT and PacGen Cellco, LLC, as amended by First Amendment to Exclusive License Agreement (UMass IP) dated August 25, 2005 (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).
- Exclusive License Agreement (ACT IP) dated May 14, 2004 between ACT and PacGen Cellco, LLC, as amended by First Amendment to Exclusive License Agreement (ACT IP) dated August 25, 2005 (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).
- 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).
- 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-OSB 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).

- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).

- 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).
- 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.\*\*
- 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.\*\*
- 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).
- 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).
- Letter from Pritchett, Siler & Hardy, P.A. regarding change in independent accountants (previously filed as Exhibit 16.1 to the Registrant s Current Report on Form 8-K filed on May 10, 2005 (File No. 000-50295) and incorporated by reference herein).
- 23.1 Consent of Stonefield Josephson, Inc.\*
- 23.2 Consent of Pierce Atwood LLP (included in Exhibit 5.1 filed herewith).\*
- 24.1 Power of Attorney (included on the signature pages to this Registration Statement as originally filed).
- \* Filed herewith.
- \*\* Previously filed.