

Fibrocell Science, Inc.
Form S-1/A
May 07, 2010

As filed with the Securities and Exchange Commission on May 7, 2010 Registration No. 333-165936

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
Amendment No. 1 to
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933
FIBROCELL SCIENCE, INC.
(Exact name of registrant as specified in its charter)**

Delaware

2834

87-0458888

(State or other jurisdiction of
incorporation or organization)

(Primary Standard Industrial
Classification Code Number)

(I.R.S. Employer Identification
Number)

405 Eagleview Boulevard
Exton, Pennsylvania 19341
(484) 713-6000

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

Declan Daly
405 Eagleview Boulevard
Exton, Pennsylvania 19341
(484) 713-6000

(Name, address, including zip code, and telephone number,
including area code, of agent for service)

Copies to:

Cavas S. Pavri, Esq.
Cozen O'Connor
1900 Market Street
Philadelphia, PA 19103
Professional Corporation
(215) 665-5542

Facsimile: (215) 701-2478

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: As soon as practicable
after the effective date of this registration statement.

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.

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

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 THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

This information in this prospectus is not complete and may be changed. We 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.

PRELIMINARY PROSPECTUS SUBJECT TO COMPLETION, DATED MAY 7, 2010

PROSPECTUS
FIBROCELL SCIENCE, INC.
10,559,461 Common Stock

This prospectus relates to the resale of our common stock by certain of our stockholders, or Selling Stockholders, named in the section of this prospectus titled Selling Security Holders. The following shares may be offered for resale under this prospectus: (a) 5,076,664 shares of common stock issued pursuant to a securities purchase agreement, or the Securities Purchase Agreement, with certain accredited investors, (b) 5,076,664 shares of common stock underlying warrants issued pursuant to the Securities Purchase Agreement, and (c) 406,133 shares of common stock underlying the warrants issued to the placement agents in the offering completed pursuant to the Securities Purchase Agreement.

Although we will pay substantially all the expenses incident to the registration of the shares, we will not receive any proceeds from the sales by the Selling Stockholders. We will, however, to the extent the warrants are exercised for cash, as opposed to being exercised on a cash-less basis as permitted in the warrants, receive proceeds from such exercises; to the extent we receive such proceeds, they will be used for working capital purposes.

Our common stock is presently quoted for trading under the symbol FCSC on the over the counter bulletin board, or OTCBB. On May 4, 2010, the last sales price of the common stock, as reported on the OTCBB was \$0.71 per share.

Investing in our common stock is highly speculative and involves a high degree of risk. You should purchase these securities only if you can afford a complete loss of your investment. You should carefully consider the risks and uncertainties described under the heading Risk Factors beginning on page 4 of this prospectus before making a decision to purchase our common stock.

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

The date of this prospectus is _____, 2010

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PROSPECTUS SUMMARY

This summary highlights information set forth in greater detail elsewhere in this prospectus. It may not contain all the information that may be important to you. You should read the following summary together with the more detailed information regarding us and our common stock being sold in this offering, including the information incorporated by reference into this prospectus. Unless the context requires otherwise, references to the Company, Fibrocell, we, our, and us, refer to Fibrocell Science, Inc. and its subsidiaries.

Our Company

We are an aesthetic and therapeutic development stage biotechnology company focused on developing novel skin and tissue rejuvenation products. Our clinical development product candidates are designed to improve the appearance of skin injured by the effects of aging, sun exposure, acne and burn scars with a patient's own, or autologous, fibroblast cells produced by our proprietary Fibrocell process. Our clinical development programs encompass both aesthetic and therapeutic indications. Our most advanced indication is for the treatment of nasolabial folds/wrinkles (United States adopted name, or USAN, is azficel-T) and has completed Phase III clinical studies, and the related Biologics License Application, or BLA, has been submitted to the Food and Drug Administration, or FDA. In October 2009, the FDA's Cellular, Tissue and Gene Therapies Advisory Committee reviewed this indication. On December 21, 2009, Fibrocell Science received a Complete Response letter from the FDA related to the BLA for azficel-T. A Complete Response letter is issued by the FDA's Center for Biologics Evaluation and Research (CBER) when the review of a file is completed and additional data are needed prior to approval. The Complete Response letter requested that we provide data from a histopathological study on biopsied tissue samples from patients following injection of azficel-T. The letter also requested finalized Chemistry, Manufacturing and Controls (CMC) information regarding the manufacture of azficel-T as follow-up to discussions that occurred during the BLA review period, as well as revised policies and procedures regarding shipping practices, and proposed labeling.

During 2009 we completed a Phase II/III study for the treatment of acne scars. During 2008 we completed our open-label Phase II study related to full face rejuvenation.

We also develop and market an advanced skin care product line through our Agera subsidiary, in which we acquired a 57% interest in August 2006.

Exit from Bankruptcy

On August 27, 2009, the United States Bankruptcy Court for the District of Delaware in Wilmington entered an order, or Confirmation Order, confirming the Joint First Amended Plan of Reorganization dated July 30, 2009, as supplemented by the Plan Supplement dated August 21, 2009, or the Plan, of Isolagen, Inc. and Isolagen's wholly owned subsidiary, Isolagen Technologies, Inc. The effective date of the Plan was September 3, 2009.

Our officers and directors as of the effective date were all deemed to have resigned and a new board of directors was appointed. As of the effective date, our initial board of directors consisted of: David Pernock, Paul Hopper and Kelvin Moore. Dr. Robert Langer was appointed to the Board in late September 2009. Declan Daly remained as chief operating officer and chief financial officer of the reorganized company, and in November 2009, he was appointed to the Board of Directors. Mr. Pernock became our chief executive officer in February 2010.

Pursuant to the Plan, all of our equity interests, including without limitation our common stock, options and warrants outstanding as of the effective date were cancelled. On the effective date, we completed an exit financing of common stock in the amount of \$2 million, after which the equity holders of our company were:

7,320,000 shares, to our pre-bankruptcy lenders and the lenders that provided us our debtor-in-possession facility, collectively;

3,960,000 shares, to the holders of our 3.5% convertible subordinated notes;

600,000 shares, to our management as of the effective date, which was our chief operating officer;

120,000 shares, to the holders of our general unsecured claims; and

2,666,666 shares, to the purchasers of shares in the \$2 million exit financing (our pre-bankruptcy lenders, the lenders that provided us our debtor-in-possession facility and the holders of our 3.5% convertible subordinated notes were permitted to participate in our exit financing).

In the Plan, in addition to the common stock set forth above, each holder of Isolagen's 3.5% convertible subordinated notes, due November 2024, in the approximate non-converted aggregate principal amount of \$81 million, received, in full and final satisfaction, settlement, release and discharge of and in exchange for any and all claims arising out of the 3.5% convertible subordinated notes, its *pro rata* share of an unsecured note in the principal amount of \$6 million, or the New Notes. The New Notes have the following features:

12.5% interest payable quarterly in cash or, at our option, 15% payable in kind by capitalizing such unpaid amount and adding it to the principal as of the date it was due;

mature June 1, 2012;

at any time prior to the maturity date, we may redeem any portion of the outstanding principal of the New Notes in cash at 125% of the stated face value of the New Notes; provided that we will be obligated to redeem all outstanding New Notes upon the following events: (a) we or our subsidiary, Fibrocell Technologies, Inc. (formerly, Isolagen Technologies, Inc.) successfully complete a capital campaign raising in excess of \$10,000,000; or (b) we or our subsidiary, Fibrocell Technologies, Inc., are acquired by, or sell a majority stake to, an outside party;

the New Notes contain customary representations, warranties and covenants, including a covenant that we and our subsidiary, Fibrocell Technologies, Inc., shall be prohibited from the incurrence of additional debt without obtaining the consent of 66 2/3% of the New Note holders.

Recent Financing

On March 4, 2010 pursuant to a securities purchase agreement, we completed an offering, referred to as the Private Offering, in which we issued to certain accredited investors in the aggregate 5,076,664 shares of common stock at a purchase price of \$0.75 per share. Each investor also received a warrant to purchase the same number of shares of common stock acquired in the Private Offering at an exercise price of \$0.98 per share. The aggregate purchase price paid by the investors for the common stock and the warrants was \$3,807,500. The Company intends to use the proceeds for working capital purposes.

Effect of Private Offering on Series A Preferred

With certain exceptions, the Certificate of Designation of the Series A Preferred provides that if at any time while the Series A Preferred is outstanding, we sell or grant any option to purchase or sell or grant any right to reprice, or otherwise dispose of or issue (or announce any sale, grant or any option to purchase or other disposition), any common stock or common stock equivalents at an effective price per share that is lower than the then conversion price of the Series A Preferred, then the conversion price of the Series A Preferred will be reduced to equal the lower price.

Consequently, as a result of the purchase price of the common stock sold in the Private Offering, effective as of March 4, 2010, the conversion price of the Series A Preferred has been reduced from \$1.30 to \$0.75.

Effect of Private Offering on Warrants

With certain exceptions, the Class A warrants, Class B warrants and placement agent warrants provide that if at any time while the warrants are outstanding, we sell or grant any option to purchase or sell or grant any right to

reprice, or otherwise dispose of or issue (or announce any sale, grant or any option to purchase or other disposition), any common stock or common stock equivalents at an effective price per share that is lower than the then exercise price of the relevant warrant, then the exercise price of such warrant will be reduced to equal the lower price and the number of shares issuable thereunder will be increased such that the aggregate exercise price after the exercise price adjustment will be equal to the aggregate exercise price prior to the adjustment.

Consequently, as a result of the purchase price of the common stock sold in the Private Offering, effective as of March 4, 2010, (a) the exercise prices for the Class A, Class B and placement agent warrants have been reduced from \$1.62, \$1.95 and \$1.30 per share, respectively, to \$0.75 per share and (b) the numbers of shares underlying the Class A, Class B and placement agent warrants have been increased to 1,083,331, 1,083,332 and 433,333 respectively.

Our Contact Information

Our corporate headquarters is located at 405 Eagleview Boulevard, Exton, Pennsylvania 19341. Our phone number is (484) 713-6000. Our corporate website is www.fibrocellscience.com. Information contained on our website or any other website does not constitute part of this prospectus.

Risks Related to Our Business

Our business is subject to a number of risks, which you should be aware of before making an investment decision. These risks are discussed more fully under Item 1A. of our Annual Report on Form 10-K for the fiscal year ended December 31, 2009, which is incorporated by reference in this prospectus.

Securities Being Offered

The Selling Stockholders named in this prospectus may offer for resale the following securities:
up to 5,076,664 shares of common stock; and

up to 5,076,664 shares of common stock underlying the warrants issued in the Private Offering and 406,133 shares of common stock underlying the warrants issued to the placement agents in the Private Offering.

Although we will pay substantially all the expenses incident to the registration of the shares, we will not receive any proceeds from the sales by the Selling Stockholders. However, we may receive proceeds of up to \$5,373,141 (includes placement agent warrants) from the exercise of the outstanding warrants (assuming the warrants are not exercised on a cash-less basis); if such proceeds are received by us, they will be used for working capital purposes.

RISK FACTORS

You should consider the Risk Factors included under Item 1A. of our Annual Report on Form 10-K for the fiscal year ended December 31, 2009, which is incorporated by reference in this prospectus. The market or trading price of our securities could decline due to any of these risks. In addition, please read Information Regarding Forward-Looking Statements in this prospectus, where we describe additional uncertainties associated with our business and the forward-looking statements included or incorporated by reference in this prospectus. Please note that additional risks not currently known to us or that we currently deem immaterial may also impair our business and operations.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents we incorporate by reference, contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, as well as information relating to Fibrocell that is based on management's exercise of business judgment and assumptions made by and information currently available to management. When used in this document and other documents, releases and reports released by us, the words anticipate, believe, estimate, expect, intend, the facts suggest and words of similar import, are intended to identify any forward-looking statements. You should not place undue reliance on these forward-looking statements. These statements reflect our current view of future events and are subject to certain risks and uncertainties as noted below. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, our actual results could differ materially from those anticipated in these forward-looking statements. Actual events, transactions and results may materially differ from the anticipated events, transactions or results described in such statements. Although we believe that our expectations are based on reasonable assumptions, we can give no assurance that our expectations will materialize. Many factors could cause actual results to differ materially from our forward looking statements. Several of these factors include, without limitation:

our ability to finance our business and continue in operations;

whether the results of our full Phase III pivotal study and our BLA filing will result in approval of our product candidate, and whether any approval will occur on a timely basis;

our ability to meet requisite regulations or receive regulatory approvals in the United States, Europe, Asia and the Americas, and our ability to retain any regulatory approvals that we may obtain; and the absence of adverse regulatory developments in the United States, Europe, Asia and the Americas or any other country where we plan to conduct commercial operations;

whether our clinical human trials relating to the use of autologous cellular therapy applications, and such other indications as we may identify and pursue can be conducted within the timeframe that we expect, whether such trials will yield positive results, or whether additional applications for the commercialization of autologous cellular therapy can be identified by us and advanced into human clinical trials;

our ability to develop autologous cellular therapies that have specific applications in cosmetic dermatology, and our ability to explore (and possibly develop) applications for periodontal disease, reconstructive dentistry, treatment of restrictive scars and burns and other health-related markets;

our ability to decrease our manufacturing costs for our Fibrocell Therapy product candidates through the improvement of our manufacturing process, and our ability to validate any such improvements with the relevant regulatory agencies;

our ability to reduce our need for fetal bovine calf serum by improved use of less expensive media combinations and different media alternatives;

continued availability of supplies at satisfactory prices;

new entrance of competitive products or further penetration of existing products in our markets;

the effect on us from adverse publicity related to our products or the company itself;

any adverse claims relating to our intellectual property;

the adoption of new, or changes in, accounting principles;

our issuance of certain rights to our shareholders that may have anti-takeover effects;

our dependence on physicians to correctly follow our established protocols for the safe administration of our Fibrocell Therapy; and

other risks referenced from time to time elsewhere in this prospectus and in our filings with the SEC.

These factors are not necessarily all of the important factors that could cause actual results of operations to differ materially from those expressed in these forward-looking statements. Other unknown or unpredictable factors also could have material adverse effects on our future results. We undertake no obligation and do not intend to update, revise or otherwise publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of any unanticipated events. We cannot assure you that projected results will be achieved.

USE OF PROCEEDS

This prospectus relates to the resale of shares of our common stock issued pursuant to a securities purchase agreement with certain accredited investors and share of our common stock to be issued to persons who exercise warrants issued to them pursuant to the securities purchase agreement. We will not receive any proceeds from the sale of shares of common stock in this offering. However, to the extent the warrants are exercised for cash, as opposed to being exercised on a cash-less basis as permitted in the warrants, we will receive proceeds from the exercise of any warrants, up to a maximum amount of \$5,373,141 (includes placement agent warrants) (assuming the warrants are not exercised on a cash-less basis), and we will use any such proceeds for working capital purposes.

MARKET PRICE OF AND DIVIDENDS ON OUR COMMON STOCK AND RELATED STOCKHOLDER MATTERS

Market Information

On October 21, 2009, our common stock became available for trading OTCBB under the symbol FCSC. Currently, there is only a limited, sporadic and volatile market for our stock on the OTCBB. The table below presents the high and low bid price for our common stock each quarter during the past two years and reflects inter-dealer prices, without retail markup, markdown, or commission, and may not represent actual transactions.

	December 31, 2009	
	High	Low
Fourth Quarter (from October 21, 2009)	\$2.40	\$0.50

The common stock of our predecessor company, Isolagen, Inc., traded on the NYSE Amex under the symbol ILE. The common stock ceased trading on the NYSE Amex on May 6, 2009 and in June 2009 the NYSE Amex delisted the common stock from listing on the NYSE Amex. Upon the effective date of our bankruptcy plan,

the outstanding common stock of Isolagen was cancelled. Consequently, the stockholders of Isolagen prior to the effective date of the bankruptcy plan no longer have any interest as stockholders of Fibrocell by virtue of their ownership of Isolagen's common stock prior to the emergence from bankruptcy.

As of May 4, 2010, there were 19,768,676 shares of our common stock outstanding and held by 203 stockholders of record. As of May 4, 2010, there were 3,250 shares of Series A Preferred issued and outstanding.

On May 4, 2010 the last sale price of our common stock as reported on the OTCBB was \$0.71 per share.

Dividends

We have never paid any cash dividends on our common stock and our board of directors does not intend to do so in the foreseeable future. The declaration and payment of dividends in the future, of which there can be no assurance, will be determined by the board of directors in light of conditions then existing, including earnings, financial condition, capital requirements and other factors.

Holders of the Series A Preferred are entitled to receive cumulative dividends at the rate per share (as a percentage of the stated value per share) of 6% per annum (subject to increase in certain circumstances), payable quarterly in arrears on January 15, April 15, July 15 and October 15, beginning on April 15, 2010. The dividends are payable in cash, or at our option, in duly authorized, validly issued, fully paid and non-assessable shares of common stock equal to 110% of the cash dividend amount payable on the dividend payment date, or a combination thereof; provided that we may not pay the dividends in shares of common stock unless we meet certain conditions described in the Certificate of Designation. If we pay the dividend in shares of common stock, the common stock will be valued for such purpose at 80% of the average of the volume weighted average price for the 10 consecutive trading days ending on the trading day that is immediately prior to the dividend payment date.

Shares of common stock issued as dividends on the Series A Preferred are not being registered under this prospectus. Such shares are deemed to be restricted securities under Rule 144 of the Securities Act and may only be sold in compliance with Rule 144.

Penny Stock

The SEC has adopted rules that regulate broker-dealer practices in connection with transactions in penny stocks. Our stock is currently a penny stock. Penny stocks are generally equity securities with a price of less than \$5.00, other than securities registered on certain national securities exchanges. The penny stock rules require a broker-dealer, prior to a transaction in a penny stock not otherwise exempt from those rules, deliver a standardized risk disclosure document prepared by the SEC, which: (a) contains a description of the nature and level of risk in the market for penny stocks in both public offerings and secondary trading; (b) contains a description of the broker's or dealer's duties to the customer and of the rights and remedies available to the customer with respect to a violation to such duties or other requirements of securities laws; (c) contains a brief, clear, narrative description of a dealer market, including bid and ask prices for penny stocks and significance of the spread between the bid and ask price; (d) contains a toll-free telephone number for inquiries on disciplinary actions; (e) defines significant terms in the disclosure document or in the conduct of trading in penny stocks; and (f) contains such other information and is in such form as the SEC shall require by rule or regulation. The broker-dealer also must provide to the customer, prior to effecting any transaction in a penny stock, (a) bid and offer quotations for the penny stock; (b) the compensation of the broker-dealer and its salesperson in the transaction; (c) the number of shares to which such bid and ask prices apply, or other comparable information relating to the depth and liquidity of the market for such stock; and (d) monthly account statements showing the market value of each penny stock held in the customer's account. In addition, the penny stock rules require that prior to a transaction in a penny stock not otherwise exempt from those rules, the broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser's written acknowledgment of the receipt of a risk disclosure statement, a written agreement to transactions involving penny stocks, and a signed and dated copy of a written suitability statement.

These disclosure requirements may have the effect of reducing the trading activity in the secondary market for our stock if it becomes subject to these penny stock rules.

MANAGEMENT

The following table sets forth the names and ages of all of our directors and executive officers as of April 1, 2010. Our officers are appointed by, and serve at the pleasure of, the Board of Directors.

Name	Title	Age
David Pernock	Director and Chief Executive Officer	55
Declan Daly	Director, Chief Operating Officer and Chief Financial Officer	47
Paul Hopper	Director	53
Kelvin Moore	Director	60
Robert Langer	Director	61
Marc Mazur	Director	51

Biographical information with respect to our directors and executive officers is provided below. There are no family relationships between any of our executive officers or directors.

David Pernock. Mr. Pernock has served as a chairman of the board of Fibrocell since September 2009 and as our Chief Executive Officer since February 2010. From December 1993 until November 2009, Mr. Pernock held various positions at GlaxoSmithKline, eventually serving as Senior Vice President of Pharmaceuticals, Vaccines (Biologics), Oncology, Acute Care, and HIV Divisions. Mr. Pernock is a director of Martek Biosciences Corporation. Mr. Pernock holds a B.S. in Business Administration from Arizona State University.

Declan Daly. Mr. Daly has served as Fibrocell's Chief Operating Officer and Chief Financial Officer since September 2009, and as a director of Fibrocell since November 2009. Mr. Daly served as Isolagen's Chief Executive Officer and President from January 2008 until September 3, 2009, as Chief Financial Officer from June 2006 until March 2008, and as Chief Operating Officer from June 2007 until January 2008. Mr. Daly was elected to the Board of Directors of Isolagen in June 2008. Mr. Daly served as Executive Vice President and Chief Financial Officer of Inamed Corp. from November 2004 until March 2006, prior to which he served as Inamed's Senior Vice President since September 2002 and as the Corporate Controller and Principal Accounting Officer since March 2002. He was previously Vice President of Finance & Administration for Inamed International Corp. from 1998 to 2002. From 1996 to 1998, Mr. Daly was a Senior Manager with BDO Simpson Xavier, Chartered Accountants or BDO, in Dublin. Prior to joining BDO, he worked with PricewaterhouseCoopers in Dublin and London. Mr. Daly holds a B.A. in Management Science and Industrial Systems Studies from Trinity College, Dublin and he is also a Fellow of the Institute of Chartered Accountants in Ireland.

Paul Hopper. Mr. Hopper has served as a director of Fibrocell since September 2009. Mr. Hopper has served as Managing Director of Cappello Group, Inc, an investment bank based in Los Angeles, since November 2005. From September 2003 to February 2005, Mr. Hopper served as Managing Director of Australian Cancer Technology Ltd, an oncology biotechnology company. Mr. Hopper is also a Director of Somnomed Ltd, Viralytics Ltd, and pSivida Corp.

Kelvin Moore. Mr. Moore has served as a director of Fibrocell since September 2009. Since March 2009, Mr. Moore has served as the consultant sales director for the UK based Seaborne Group developing their business in building constructions from converting shipping sea containers. Since July 2008, Mr. Moore has been a director of Acorn Cultural Developments Limited which is developing a social networking site. Between June 2004 and May 2008, Mr. Moore was a senior advisor with Exit Strategy Planning dealing with the sale of businesses. Mr. Moore holds a London University Degree in Geography and Pure Mathematics.

Robert Langer. Dr. Langer has served as a director of Fibrocell since September 2009. Dr. Langer was named an Institute Professor at Massachusetts Institute of Technology in 2006 and has been on the faculty of Massachusetts Institute of Technology since 1978. Dr. Langer is also a Director of Alseres Pharmaceuticals, Inc. and Echo Therapeutics, Inc. Dr. Langer received his Bachelor's Degree from Cornell University in 1970 and his Sc.D. from the Massachusetts Institute of Technology in 1974, both in Chemical Engineering.

Marc B. Mazur. Mr. Mazur has served as a director of Fibrocell since April 2010. Since May 2009, Mr. Mazur has served as the Chairman of Elsworthy Capital Management Ltd., a London-based European equity hedge fund. From October 2006 until December 2009, Mr. Mazur served as the CEO of Brevan Howard U.S. Asset Management, the U.S. arm of London-based Brevan Howard. In 2001 Mr. Mazur founded Ambassador Capital Group, a privately held investment and advisory entity providing capital, business development and strategic planning advice to companies in the healthcare, financial services and real estate fields. Mr. Mazur received his B.A. in political science from Columbia University in 1981 and a J.D. from Villanova University in 1984.

In connection with our emergence from bankruptcy, our plan of reorganization provided that our directors prior to our emergence from bankruptcy were all deemed to have resigned, and a new board of directors was appointed as of the effective date of our emergence from bankruptcy. Pursuant to the plan of reorganization, the new board of directors was determined by the lenders that provided us debtor-in-possession while we were in bankruptcy and the investors that provided us exit financing. The members of our board of directors that were designated in our plan of reorganization are David Pernock, Paul Hopper and Kelvin Moore.

No director is related to any other director or executive officer of our company or our subsidiaries, and, subject to the above paragraph, there are no arrangements or understandings between a director and any other person pursuant to which such person was elected as director.

Our Certificate of Incorporation, as amended, provides that the Board of Directors be divided into three classes. Each director serves a term of three years. At each annual meeting, the stockholders elect directors for a full term or the remainder thereof, as the case may be, to succeed those whose terms have expired. Each director holds office for the term for which elected or until his or her successor is duly elected.

No director or officer of our company has, during the last five years: (i) been convicted of any criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, United States federal or state securities laws or finding any violations with respect to such laws.

Board Committees

We do not currently have an audit committee, compensation committee or nominating committee. Our full board currently performs the duties and responsibilities of such committees.

Executive Officer Compensation

The following table sets forth information regarding compensation with respect to the fiscal years ended December 31, 2009 and 2008 paid or accrued by us to or on behalf of those persons who, during the fiscal year ended December 31, 2009, served as our Chief Executive Officer or Chief Financial Officer, as well as our most highly compensated key employees as of December 31, 2009 (the "named executive officers").

Summary Compensation Table 2009

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)(1)	Option Awards (\$)(1)	All	Total (\$)
						Other Compensation (\$)	
Declan Daly, Chief Financial Officer and Chief Operating Officer (2)	2009	403,538	100,000	288,000(3)	17,908(4)		809,446
Todd Greenspan,	2008	427,635	25,000		766,839(5)		1,219,474
	2009	176,308	50,000				226,308
	2008	231,385			78,663(7)		310,048

Former Chief Financial Officer

(6)

John Maslowski,

Vice President of Operations

2009

149,279

16,117(8)

165,396

Karen Donhauser,

Vice President of Quality

2009

110,936

9,670(9)

120,606

8

- (1) Except as disclosed in footnotes (8) and (9), represents the full grant date fair value of the stock award or option grant, as applicable, calculated in accordance with FASB ASC Topic 718. For the purposes of making the stock award calculation, an assumed value of \$0.48 per share was utilized. For the purposes of making the option calculation for 2009, the following assumptions were made:
- (a) expected life (years) 3.5 (for the options issued to Mr. Maslowski and Ms. Donhauser);
 - expected life (years) 2.5 (for the options issued to Mr. Daly);
 - (b) volatility 65.87%;
 - (c) dividend yield none; and
 - (d) discount rate 1.64% (for the options issued to Mr. Maslowski and

Ms. Donhauser);
discount rate
0.99% (for the
options issued to
Mr. Daly). For
the purposes of
making the
option
calculation for
2008, the
following
assumptions
were made:
(a) expected life
(years) 10 (for
the options
issued to
Mr. Daly);
expected life
(years) 6 (for the
options issued to
Mr. Greenspan);
(b) volatility
82.87% (for the
options issued to
Mr. Daly);
volatility
105.41% (for the
options issued to
Mr. Greenspan);
(c) dividend yield
none; and
(d) discount rate
3.89% (for the
options issued to
Mr. Daly);
discount rate
2.83% (for the
options issued to
Mr. Greenspan).
We excluded the
assumed
forfeiture rate for
the purposes of
the calculations
in the table.

- (2) Mr. Daly served
as our Chief
Executive
Officer during

2009. Mr. Daly is currently our Chief Financial Officer and Chief Operating Officer.

- (3) Pursuant to our bankruptcy plan, our management was granted shares of our common stock. Mr. Daly received 600,000 shares of common stock, of which 300,000 shares vested immediately and 150,000 shares vest on each successive one-year anniversary; provided that if we do not renew Mr. Daly's employment agreement at the end of its term or in the event of a change of control, any unvested shares will automatically vest.
- (4) Consists of an option issued in connection with Mr. Daly joining our board of directors in November 2009 to purchase 50,000 shares of common stock at an exercise price of \$0.75 per

share.

- (5) During 2008, Mr. Daly was granted options to purchase 450,000 shares of common stock. These options were terminated in our bankruptcy and are no longer outstanding.
- (6) Mr. Greenspan served as our Chief Financial Officer until September 2009.
- (7) During 2008, Mr. Greenspan was granted options to purchase 200,000 shares of common stock. These options were terminated in our bankruptcy and are no longer outstanding.
- (8) Consists of an option to purchase 100,000 shares of common stock at an exercise price of \$0.75 per share of which 50,000 shares vest on October 6, 2010 and 50,000 shares vest if our BLA is approved by the FDA. The grant date fair value in the table above excludes

the 50,000 shares that would vest if our BLA is approved by the FDA as that portion of the option is subject to performance conditions and is not considered to be probable pursuant to FASB ASC Topic 718. The full grant date fair value of the option assuming the performance conditions are met is \$32,234.

- (9) Consists of an option to purchase 60,000 shares of common stock at an exercise price of \$0.75 per share of which 30,000 shares vest on October 6, 2010 and 30,000 shares vest if our BLA is approved by the FDA. The grant date fair value in the table above excludes the 30,000 shares that would vest if our BLA is approved by the FDA as that portion of the option is subject to performance conditions and is not considered to be probable pursuant to

FASB ASC
Topic 718. The
full grant date
fair value of the
option assuming
the performance
conditions are
met is \$19,341.

Equity Awards

The following table sets forth certain information concerning our outstanding options for our named executive officers at December 31, 2009.

Outstanding Equity Awards At Fiscal Year-End 2009

Name	Number of Securities	Number of Securities	Option Exercise Price (\$)	Option Expiration Date	Number of shares of stock that have not vested (#)	Market value of shares of stock that have not vested (\$)
	Underlying Unexercised Options (#) Exercisable	Underlying Unexercised Options (#) Unexercisable				
Declan Daly	50,000		0.75	11/20/2014	300,000	345,000(1)
Todd Greenspan						
John Maslowski		100,000(2)	0.75	10/6/2014		
Karen Donhauser		60,000(3)	0.75	10/6/2014		

(1) Based on the closing price of our common stock of \$1.15 on December 31, 2009.

(2) Consists of an option to purchase 100,000 shares of common stock at an exercise price of \$0.75 per share of which 50,000 shares vest on October 6, 2010 and 50,000 shares vest if our BLA is approved by the FDA.

(3) Consists of an option to purchase 60,000 shares of

common stock
at an exercise
price of \$0.75
per share of
which 30,000
shares vest on
October 6, 2010
and 30,000
shares vest if
our BLA is
approved by the
FDA.

None of our named executive officers has exercised any options.

Pension Benefits

None of our named executives participate in or have account balances in qualified or non-qualified defined benefit plans sponsored by us.

Nonqualified Deferred Compensation

None of our named executives participate in or have account balances in non-qualified defined contribution plans or other deferred compensation plans maintained by us.

Director Compensation

In September 2009, our board of directors approved a compensation plan for its non-executive directors pursuant to which each such director will receive an annual fee of \$50,000, payable in monthly installments, and upon appointment to the board of directors will receive an initial option grant to purchase 200,000 shares of Company common stock at the fair market value of the Company on the date of issuance. On September 30, 2009, the board of directors agreed to provide Mr. David Pernock, the Chairman of the Board, with the above cash compensation, as well as an option to purchase 450,000 shares of Company common stock at the fair market value of the Company on the date of issuance, of which 300,000 shares vest immediately and 150,000 shares vest in 12 months, provided Mr. Pernock is Chairman of the Board on such date.

Director Compensation Table 2009

Name	Fees Earned or Paid	Option Awards (\$)(1)	All other	Total (\$)
	in Cash (\$)		compensation (\$)	
Post-bankruptcy directors				
David Pernock	12,639	151,537(2)	15,000(3)	179,176
Paul Hopper	16,250	61,866(4)		78,116
Robert Langer	13,333	61,866(4)	16,667(3)	91,866
Kelvin Moore	16,250	61,866(4)		78,116
Declan Daly	(5)	(5)		(5)
Pre-bankruptcy directors (6)				

Name	Fees Earned or Paid	Option Awards	All other compensation	Total
	in Cash (\$)	(\$)(1)	(\$)	(\$)
Steven Morrell	29,015			
Kenneth A. Selzer	28,308			
Nicholas L. Teti	95,154			
Henry Y.L. Toh	29,015			
Terry E. Vandewarker	37,508			
Marshall G. Webb	35,385			

- (1) Represents the full grant date fair value of the option grant calculated in accordance with FASB ASC Topic 718. For the purposes of making the option calculation, the following assumptions were made:
- (a) expected life (years) 2.5 (for the options issued to Messrs. Hopper, Langer and Moore);
 - expected life (years) 3.0 (for the options issued to Mr. Pernock);
 - (b) volatility 66.75%;
 - (c) dividend yield none; and
 - (d) discount rate 1.36% (for the options issued to Messrs. Hopper, Langer and Moore); discount

rate 1.45% (for the options issued to Mr. Pernock).

- (2) As of December 31, 2009, Mr. Pernock held options to purchase an aggregate of 450,000 shares of our common stock with an exercise price of \$0.75 per share.
- (3) Consists of consulting fees.
- (4) As of December 31, 2009, Messrs. Hopper, Langer and Moore each held an option to purchase 200,000 shares of our common stock with an exercise price of \$0.75 per share.
- (5) See Executive Officer Compensation Summary Compensation Table 2009.
- (6) All options issued to our pre-bankruptcy directors were terminated in the bankruptcy and are no longer outstanding. No options were

issued to these
directors in
2009.

Equity Incentive Plan

We currently have an outstanding equity incentive plan, the Fibrocell Science, Inc. 2009 Equity Incentive Plan, or Incentive Plan, that permits us to grant awards in the form of incentive stock options, as defined in Section 422 of the Internal Revenue Code, or Code, as well as options which do not so qualify, called non-qualified stock options, stock units, stock awards, stock appreciation rights, and other stock-based awards. The purpose of the plan is to promote the interests of Fibrocell, and to motivate, attract and retain the services of the people upon whose efforts and contributions our success depends.

The three outstanding stock option plans we had prior to our reorganization, (a) our 2001 Stock Option and Appreciation Rights Plan reserving 5,000,000 shares of common stock for the issuance of options to employees, directors and consultants, (b) our 2003 Stock Option and Appreciation Rights Plan reserving 2,250,000 shares of common stock for the issuance of options to employees, directors and consultants, and (c) our 2005 Equity Incentive Plan reserving 2,100,000 shares of common stock for the issuance of options to employees, directors and consultants, terminated as of the effective date of our reorganization and all outstanding options issued pursuant to the plans were cancelled.

Management Agreements

Effective upon our exit from bankruptcy on September 3, 2009, we entered into an employment agreement, pursuant to which Mr. Daly agreed to serve as our chief operating officer until December 31, 2011, subject to the automatic renewal of the agreement for an additional one-year term unless we notify Mr. Daly prior to the expiration of the agreement of our intention not to renew the agreement. Notwithstanding the foregoing, if a change of control occurs during the term of the agreement, we may not terminate the agreement for a period of two years after such change of control. The agreement provides Mr. Daly with an annual base salary of \$300,000, which will be periodically reviewed and may be increased at the Board's discretion. Mr. Daly received a one-time signing bonus payment in the amount of \$100,000. Mr. Daly is entitled to receive an annual bonus, payable each year subsequent

to the issuance of final audited financial statements, but in no case later than 120 days after the end of our most recently completed fiscal year. The final determination on the amount of the annual bonus will be made by the Compensation Committee of the Board of Directors, based primarily on criteria mutually agreed upon with Mr. Daly. The targeted amount of the annual bonus shall be 50% of Mr. Daly's base salary. The actual annual bonus for any given period may be higher or lower than 50%. For any fiscal year in which Mr. Daly is employed for less than the full year (other than for 2009), he shall receive a bonus which is prorated based on the number of full months in the year which are worked. Mr. Daly is entitled to a bonus of \$50,000 if we are able to complete a capital raise or series of capital raises in excess of \$6.0 million, provided Mr. Daly is our chief operating officer at such time. Mr. Daly is entitled to a bonus of \$50,000 if our BLA is approved by the FDA, provided Mr. Daly is our chief operating officer at such time.

If we terminate the employment agreement without cause or if Mr. Daly dies or become disabled, we will continue to pay Mr. Daly (or his heirs) his base salary at such time for the longer of the remainder of the term of the employment agreement or 12 months from the date of termination. If we terminate the employment agreement without cause following a change of control or if Mr. Daly terminates the employment agreement for good reason, we must pay Mr. Daly, within 30 days of termination, a cash payment equal to the amounts payable for the greater of the remainder of the term of the employment agreement or 12 months from the date of termination.

Pursuant to the employment agreement and as provided in our bankruptcy reorganization plan, Mr. Daly received a grant of 600,000 shares of common stock, of which 300,000 shares vested immediately and 150,000 shares vest on each successive one-year anniversary; provided that if we do not renew the employment agreement at the end of the term or in the event of a change of control, any unvested shares will automatically vest. We have agreed to make a tax gross-up payment with respect to the equity grant.

Mr. Daly has agreed that during his employment and for a period of 12 months after termination or expiration of his employment agreement he will not compete with us, solicit our employees, or attempt to divert or take away our customers and clients.

Effective upon our exit from bankruptcy on September 3, 2009, we entered into a consultant agreement, pursuant to which Dr. Langer agreed to provide consulting services to us, including serving as a scientific advisor. The agreement has a one year term, provided that either party may terminate the agreement on 30 days notice. The agreement provides Dr. Langer annual compensation of \$50,000.

On February 1, 2010, the Company entered into an employment agreement with Mr. Pernock pursuant to which Mr. Pernock agreed to serve as Chief Executive Officer of the Company for an initial term ending February 1, 2013, which may be renewed for an additional one-year term by mutual agreement. The agreement provides for an annual salary of \$450,000. Mr. Pernock is entitled to receive an annual bonus each year, payable subsequent to the issuance of the Company's final audited financial statements, but in no case later than 120 days after the end of its most recently completed fiscal year. The final determination on the amount of the annual bonus will be made by the Board of Directors (or the Compensation Committee of the Board of Directors, if such committee has been formed), based on criteria established by the Board of Directors (or the Compensation Committee of the Board of Directors, if such committee has been formed). The targeted amount of the annual bonus shall be 60% of Mr. Pernock's base salary, although the actual bonus may be higher or lower.

Under the agreement, Mr. Pernock was granted a ten-year option to purchase 1,650,000 shares at an exercise price per share equal to the closing price of the Company's common stock on the date of execution of the agreement, or February 1, 2010. The options vest as follows: (i) 250,000 shares upon execution of the agreement; (ii) 100,000 shares upon the closing of a strategic partnership or licensing deal with a major partner that enables the Company to significantly improve and/or accelerate its capabilities in such areas as research, production, marketing and/or sales and enable the Company to reach or exceed its major business milestones within the Company's strategic and operational plans, provided Mr. Pernock is the CEO on the closing date of such partnership or licensing deal (the determination of whether any partnership or licensing deal meets the foregoing criteria will be made in good faith by the Board upon the closing of such partnership or licensing deal); and (iii) 1,300,000 shares in equal 1/36th installments (or 36,111 shares per installment) monthly over a three-year period, provided Executive is the CEO on each vesting date. The vesting of all options set forth above shall accelerate upon a change in control as

defined in the agreement, provided Mr. Pernock is employed by the Company within 60 days prior to the date of such change in control.

If Mr. Pernock's employment is terminated at the Company's election at any time, for reasons other than death, disability, cause (as defined in the agreement) or a voluntary resignation, or by Mr. Pernock for good reason (as defined in the agreement), Mr. Pernock shall be entitled to receive severance payments equal to twelve months of Mr. Pernock's base salary and of the premiums associated with continuation of Mr. Pernock's benefits pursuant to COBRA to the extent that he is eligible for them following the termination of his employment; provided that if anytime within eighteen months after a change in control either (i) Mr. Pernock is terminated, at the Company's election at any time, for reasons other than death, disability, cause or voluntary resignation, or (ii) Mr. Pernock terminates the agreement for good reason, Mr. Pernock shall be entitled to receive severance payments equal to: (1) two years of Mr. Pernock's base salary, (2) Mr. Pernock's most recent annual bonus payment, and (3) the premiums associated with continuation of Mr. Pernock's benefits pursuant to COBRA to the extent that he is eligible for them following the termination of his employment for a period of one year after termination. All severance payments shall be made in a lump sum within ten business days of Mr. Pernock's execution and delivery of a general release of the Company, its parents, subsidiaries and affiliates and each of its officers, directors, employees, agents, successors and assigns in a form acceptable to the Company. If severance payments are being made, Mr. Pernock has agreed not to compete with the Company until twelve months after the termination of his employment.

RELATED PARTY TRANSACTIONS

Review and Approval Policies and Procedures for Related Party Transactions

Pursuant to Board policy, our executive officers and directors, and principal stockholders, including their immediate family members and affiliates, are not permitted to enter into a related party transaction with us without the prior consent of our audit committee, or other independent committee of our board of directors in the case it is inappropriate for our audit committee to review such transaction due to a conflict of interest. Any request for us to enter into a transaction with an executive officer, director, principal stockholder, or any of such persons' immediate family members or affiliates, in which the amount involved exceeds \$120,000 must first be presented to our audit committee for review, consideration and approval. All of our directors, executive officers and employees are required to report to our audit committee any such related party transaction. In approving or rejecting the proposed agreement, our audit committee shall consider the relevant facts and circumstances available and deemed relevant to the audit committee. Our audit committee shall approve only those agreements that, in light of known circumstances, are in, or are not inconsistent with, our best interests, as our audit committee determines in the good faith exercise of its discretion. We do not currently have an audit committee and our full board currently performs the duties and responsibilities of the audit committee.

PRINCIPAL STOCKHOLDERS

The following table sets forth information regarding the beneficial ownership of our common stock as of May 4, 2010 by:

each person known by us to be the beneficial owner of more than 5% of our outstanding shares of common stock;

each of our named executive officers and directors; and

all of our officers and directors as a group.

Unless otherwise indicated, we believe that all persons named in the table have sole voting and investment power with respect to all shares of common stock beneficially owned by them. Unless otherwise indicated, the address for our named executive officers and directors is c/o Fibrocell Science Inc., 405 Eagleview Boulevard, Exton, Pennsylvania 19341.

Name of Beneficial Owner	Common stock Beneficially Owned(1)	Percent of Class(2)
Declan Daly	650,000(3)	3.3%
David Pernock	694,444(4)	3.4%
Paul Hopper	200,000(5)	1.0%
Kelvin Moore	200,000(5)	1.0%
Robert Langer	200,000(5)	1.0%
Marc Mazur	100,000(6)	*
John Maslowski	100,000(7)	*
Karen Donhauser	60,000(8)	*
Todd Greenspan (9)		
All Executive Officers and Directors as a Group (5 persons)	2,204,444(10)	10.3%
Five percent or more of shareholders		
James E. Flynn (11)	2,000,000	10.1%

(1) Beneficial ownership is determined in accordance with Rule 13d-3 under the Exchange Act. Unless otherwise noted, all listed shares of common stock are owned of record by each person or entity named as beneficial owner and that person or entity has sole voting and dispositive power with respect to the shares of common stock owned by each of them. As to each person or entity named as beneficial owners, that person s or entity s percentage of ownership is

determined based on the assumption that any options or convertible securities held by such person or entity which are exercisable or convertible within 60 days of the date of this report have been exercised or converted, as the case may be.

- (2) Based upon 19,768,676 shares of common stock outstanding as of April 5, 2010.
- (3) Includes 50,000 shares underlying an option exercisable at \$0.75 per share.
- (4) Includes:
 - (i) 300,000 shares underlying an option exercisable at \$0.75 per share;
 - and (ii) 394,444 shares underlying an option exercisable at \$1.08 per share (which represents the vested portion, plus the shares that will vest within 60 days of the date of this filing, of an option to purchase 1,650,000 shares

issued in connection with Mr. Pernock's employment agreement). In addition, Mr. Pernock holds an option to purchase 150,000 shares at \$0.75 per share, which is exercisable in September 2010.

- (5) Consists of 200,000 shares underlying an option exercisable at \$0.75 per share.
- (6) Consists of 100,000 shares underlying an option exercisable at \$1.04 per share. In addition, Mr. Mazur holds an option to purchase 100,000 shares at \$1.04 per share, which is exercisable in April 2011.
- (7) Consists of 100,000 shares underlying an option exercisable at \$0.75 per share.
- (8) Consists of 60,000 shares underlying an option exercisable at \$0.75 per share.

- (9) Mr. Greenspan ceased providing services to the company on the effective date of the bankruptcy in September 2009.
- (10) Includes options to purchase 1,604,444 shares of common stock.
- (11) Reflects the beneficial ownership of the reported entities and their affiliates as reported in the Schedule 13G filed March 2, 2010. The business address for James E. Flynn, Deerfield Capital, L.P., Deerfield

Special Situations Fund, L.P., and Deerfield Management Company, L.P. is 780 Third Avenue, 37th Floor, New York, NY 10017. The business address for Deerfield Special Situations Fund International Limited is c/o Bisys Management, Bison Court, Columbus Centre, P.O. Box 3460, Road Town, Tortola, British Virgin Islands. Deerfield Capital, L.P. and Deerfield Special Situations Fund, L.P. have shared investment discretion over 708,000 shares. Deerfield Management Company, L.P. and Deerfield Special Situations Fund International Limited have shared investment discretion over 1,292,000 shares. James E. Flynn has shared investment discretion over 2,000,000 shares.

DESCRIPTION OF SECURITIES

General

We are authorized to issue 250,000,000 shares of common stock and 5,000,000 shares of preferred stock. As of April 5, 2010, we had 19,768,676 shares of common stock outstanding and 3,250 shares of Series A Preferred outstanding. In addition, as of such date we had:

4,457,000 shares of common stock issuable upon the exercise of options issued pursuant to our current stock option plan and outside our stock option plan;

543,000 shares of common stock available for issuance upon the exercise of options available for future grant under our stock option plan;

4,766,667 shares of common stock issuable upon the conversion of the Series A Preferred;

1,083,331 shares of common stock for issuance upon exercise of the Class A warrants; 1,083,332 shares of common stock for issuance upon exercise of the Class B warrants; and 433,333 shares of common stock for issuance upon exercise of the warrants issued to the placement agents for our Series A Preferred offering; and

5,076,664 shares of common stock issuable upon exercise of common stock purchase warrants issued in the March 2010 offering and 406,133 shares of common stock underlying the warrants issued to the placement agents in such offering.

Common Stock

Subject to preferences that may be applicable to any preferred stock outstanding at the time, the holders of our common stock are entitled to receive dividends out of legally available assets at such times and in such amounts as our Board of Directors may from time to time determine. Each stockholder is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders. Cumulative voting for the election of directors is not authorized.

Our common stock is not subject to conversion or redemption and holders of our common stock are not entitled to preemptive rights. Upon the liquidation, dissolution or winding up of our company, the remaining assets legally available for distribution to stockholders, after payment of claims or creditors and payment of liquidation preferences, if any, on outstanding preferred stock, are distributable ratably among the holders of our common stock and any participating preferred stock outstanding at that time. Each outstanding share of common stock is fully paid and nonassessable.

Preferred Stock

Our Board of Directors has the authority, without action by our stockholders, to designate and issue preferred stock in one or more series. Our Board of Directors may also designate the rights, preferences and privileges of each series of preferred stock, any or all of which may be greater than the rights of the common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock on the rights of holders of the common stock until our Board of Directors determines the specific rights of the holders of the preferred stock.

However, these effects might include: (a) restricting dividends on the common stock; (b) diluting the voting power of the common stock; (c) impairing the liquidation rights of the common stock; and (d) delaying or preventing a change in control of our company without further action by our stockholders.

As of the date of this prospectus, we have authorized two classes of preferred stock, Series A Convertible Preferred Stock, or Series A Preferred and Series C Junior Participating Preferred Stock, or Series C Preferred. As of April 5, 2010, there were 3,250 shares of Series A Preferred outstanding and no shares of Series C Preferred outstanding.

Series A Preferred

The Series A Preferred shares were issued in October 2009 pursuant to an agreement between us and certain accredited investors. To designate and establish the shares of Series A Preferred, our board approved, and on October 8, 2009, we filed with the Delaware Secretary of State, a Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock, or Certificate of Designation.

Dividends; Rank; Liquidation

Holders of the Series A Preferred are entitled to receive cumulative dividends at the rate per share (as a percentage of the stated value per share) of 6% per annum (subject to increase in certain circumstances), payable quarterly in arrears on January 15, April 15, July 15 and October 15, beginning on April 15, 2010. The dividends are payable in cash, or at our option, in duly authorized, validly issued, fully paid and non-assessable shares of common stock equal to 110% of the cash dividend amount payable on the dividend payment date, or a combination thereof; provided that we may not pay the dividends in shares of common stock unless we meet certain conditions described in the Certificate of Designation. If we pay the dividend in shares of common stock, the common stock will be valued for such purpose at 80% of the average of the volume weighted average price for the 10 consecutive trading days ending on the trading day that is immediately prior to the dividend payment date.

Shares of common stock issued as dividends on the Series A Preferred are not being registered under this prospectus. Such shares are deemed to be restricted securities under Rule 144 of the Securities Act and may only be sold in compliance with Rule 144.

The Series A Preferred ranks senior to all shares of common stock.

Upon our liquidation, dissolution or winding-up, whether voluntary or involuntary, the holders of the Series A Preferred shall be entitled to receive out of our assets, whether capital or surplus, an amount equal to the stated value of the common stock, plus any accrued and unpaid dividends thereon and any other fees or liquidated damages then due and owing thereon under the Certificate of Designation, for each share of Series A Preferred before any distribution or payment shall be made to the holders of any junior securities, and if our assets are insufficient to pay in full such amounts, then the entire assets to be distributed to the holders of the Series A Preferred shall be ratably distributed among the holders in accordance with the respective amounts that would be payable on such shares if all amounts payable thereon were paid in full.

Conversion; Conversion Price; Forced Conversion; Optional Redemption

Each share of Series A Preferred is convertible into a number of shares of common stock equal to (1) the stated value of the share (\$1,000), divided by (2) the conversion price, which is currently \$0.75, but is subject to adjustment as discussed below. We refer to this price as the Conversion Price.

With certain exceptions, if, at any time while the Series A Preferred is outstanding, we sell or grant any option to purchase or sell or grant any right to reprice, or otherwise dispose of or issue (or announce any sale, grant or any option to purchase or other disposition), any common stock or common stock equivalents at an effective price per share that is lower than the then Conversion Price, then the Conversion Price will be reduced to equal the lower price. The Conversion Price is also subject to proportional adjustment in the event of any stock split, stock dividend, reclassification or similar event with respect to the common stock.

Commencing six months from the date of the agreement pursuant to which we issued the Series A Preferred, if the volume weighted average price for each of any 20 consecutive trading days exceeds 200% of the then effective Conversion Price and various other equity conditions are satisfied (including that the resale of the shares underlying the Series A Preferred has been registered under the Securities Act), upon 30 days notice, the Series A Preferred plus all accrued and unpaid dividends will automatically convert into shares of common stock.

Commencing two years from the date of the agreement pursuant to which we issued the Series A Preferred, upon 30 days notice and provided various other equity conditions are satisfied (including that the resale of the shares underlying the Series A Preferred has been registered under the Securities Act), we may redeem some or all of the then outstanding Series A Preferred for cash in an amount equal to the 150% of the stated value of the Series A Preferred.

Voting

The holders of the Series A Preferred have no voting rights except with respect to specified matters affecting the rights of the Series A Preferred.

Negative Covenants

As long as any shares of Series A Preferred are outstanding, we may not, directly or indirectly: (a) amend our charter documents in any manner that materially and adversely affects any rights of the holders of the Series A Preferred; (b) pay cash dividends or distributions on our junior securities (including the common stock); or (c) enter into any transaction with any affiliate of ours which would be required to be disclosed in any public filing, unless such transaction is made on an arm's-length basis and expressly approved by a majority of our disinterested directors.

Triggering Events

In the event of a Triggering Event (as defined in the Certificate of Designation and described below), any holder of Series A Preferred may require us to redeem all of its Series A Preferred, at a redemption price equal to the greater of (a) 130% of the stated value and (b) the product of (i) the volume weighted average price on the trading day immediately preceding the date of the Triggering Event and (ii) the stated value divided by the then Conversion Price, plus all accrued but unpaid dividends thereon and all liquidated damages and other costs, expenses or amounts due in respect of the Series A Preferred. Triggering Events include, among other things, bankruptcy related events, change of control transactions (as defined in the Certificate of Designation), and various types of failures to perform under, and breaches of, the transaction documents.

Series C Preferred

In 2006, our Board of Directors declared a dividend distribution of one right for each outstanding share of common stock to stockholders of record at the close of business on May 22, 2006, the record date. Each right entitles the registered holder to purchase from us a unit consisting of one ten-thousandth of a share of Series C Preferred at a purchase price of \$35.00 per unit, subject to adjustment. The rights are not exercisable until the distribution date and will expire at 5:00 P.M. (New York City time) on May 12, 2016, unless such date is extended or the rights are earlier redeemed or exchanged by us. The distribution date occurs upon the earlier of:

ten business days following a public announcement that a person or group of affiliated or associated persons has acquired beneficial ownership of 15% or more of our outstanding common stock (20%, in the case of certain institutional investors) other than as a result of repurchases of stock by us or certain inadvertent actions by institutional or certain other stockholders; or

ten business days (or such later date as the Board shall determine) following the commencement of a tender offer or exchange offer that would result in a person or group becoming an acquiring person.

Warrants

Class A Warrants, Class B Warrants and Placement Agent Warrants

Pursuant to, and contemporaneous with the execution of, the agreement in which we issued the Series A Preferred, we issued Class A warrants to purchase 501,542 shares of common stock and Class B warrants to purchase 416,666 shares of common stock to the investors that purchased our Series A Preferred pursuant to the agreement in which we issued the Series A Preferred. At the same time we also issued warrants to purchase 250,000 shares of common stock to the placement agents for the Series A Preferred. Each of the warrants is exercisable upon issuance and has a five-year term. The initial exercise price of the Class A warrants was \$1.62 per share, the initial exercise price of the Class B warrants was \$1.95 per share, and the initial exercise price of the warrants issued to the placement agents was \$1.30 per share.

With certain exceptions, the Class A warrants, Class B warrants and placement agent warrants provide that if at any time while the warrants are outstanding, we sell or grant any option to purchase or sell or grant any right to reprice, or otherwise dispose of or issue (or announce any sale, grant or any option to purchase or other disposition), any common stock or common stock equivalents at an effective price per share that is lower than the then exercise price of the relevant warrant, then the exercise price of such warrant will be reduced to equal the lower price and the number of shares issuable thereunder will be increased such that the aggregate exercise price after the exercise price adjustment will be equal to the aggregate exercise price prior to the adjustment.

On March 4, 2010 pursuant to a securities purchase agreement, we completed an offering, referred to as the Private Offering, in which we issued to certain accredited investors shares of common stock at a purchase price of \$0.75 per share. Consequently, as a result of the purchase price of the common stock sold in the Private Offering, effective as of March 4, 2010, (a) the conversion price of the Series A Preferred has been reduced from \$1.30 to \$0.75, (b) the exercise prices for the Class A, Class B and placement agent warrants have been reduced from \$1.62, \$1.95 and \$1.30 per share, respectively, to \$0.75 per share and (c) the numbers of shares underlying the Class A, Class B and placement agent warrants have been increased to 1,083,331, 1,083,332 and 433,333 respectively.

March 2010 Private Offering Warrants

We entered a securities purchase agreement dated March 4, 2010 with certain accredited investors pursuant to which the Company agreed to sell in the aggregate 5,076,664 shares of our common stock. In addition to the common stock purchased, each investor received a warrant to purchase the same number of shares of common stock acquired in the offering at an exercise price of \$0.98 per share. Each of the warrants was exercisable immediately and has a five-year term. The warrants may be exercised on a cash-less basis and are non-redeemable.

With certain exceptions, the warrants provide that if, at any time while the warrants are outstanding, we sell or grant any option to purchase or sell or grant any right to reprice, or otherwise dispose of or issue (or announce any sale, grant or any option to purchase or other disposition), any common stock or common stock equivalents at an effective price per share that is lower than the then exercise price of the relevant warrant, then the exercise price of such warrant will be reduced to equal the lower price and the number of shares issuable thereunder will be increased such that the aggregate exercise price after the exercise price adjustment will be equal to the aggregate exercise price prior to the adjustment. If we enter into a fundamental transaction (which term is defined in the warrants), then at the warrant holder's option, exercisable at any time concurrently with, or within 30 days after, the announcement of a fundamental transaction, we must redeem all or any portion of the warrant from the holder by paying to the holder an amount of cash equal to the Black Scholes value of the remaining unexercised portion of this warrant on or prior to the date of the consummation of such fundamental transaction. Any cash payments to be made pursuant to the preceding sentence shall have priority to payments to holders of common stock in connection with a fundamental transaction. The assumptions to be used in calculating the Black Scholes value are set forth in Schedule 1 to the warrant.

Registration Rights

In connection with the Series A Preferred purchase agreement, we also entered into a Registration Rights Agreements with the purchasers of the Series A Preferred, which requires us to register the resale of the 110% of the

shares of common stock underlying the Series A Preferred and the shares of common stock underlying the Class A warrants, Class B warrants and placement agent warrant. We are required to file the registration statement within 45 days of the date of execution of the purchase agreement and the registration statement must be declared effective within 90 days of the date of the agreement (or 120 days if the registration statement is fully reviewed by the SEC), or we will be required to pay liquidated damages as set forth in the agreement.

In connection with the March 4, 2010 securities purchase agreement, we also entered into registration rights agreements with the purchasers of the common stock, which requires us to register the resale of the shares of common stock issued and the shares of common stock underlying the warrants issued.

12.5% Notes

In our bankruptcy reorganization plan, each holder of Isolagen's 3.5% convertible subordinated notes, due November 2024, in the approximate non-converted aggregate principal amount of \$81 million, received, in full and final satisfaction, settlement, release and discharge of and in exchange for any and all claims arising out of the 3.5% convertible subordinated notes, its *pro rata* share of an unsecured note in the principal amount of \$6 million, or the New Notes. The New Notes have the following features:

12.5% interest payable quarterly in cash or, at our option, 15% payable in kind by capitalizing such unpaid amount and adding it to the principal as of the date it was due;

mature June 1, 2012;

at any time prior to the maturity date, we may redeem any portion of the outstanding principal of the New Notes in cash at 125% of the stated face value of the New Notes; provided that we will be obligated to redeem all outstanding New Notes upon the following events: (a) we or our subsidiary, Fibrocell Technologies, Inc. (formerly, Isolagen Technologies, Inc.) successfully complete a capital campaign raising in excess of \$10,000,000; or (b) we or our subsidiary, Fibrocell Technologies, Inc., are acquired by, or sell a majority stake to, an outside party;

the New Notes contain customary representations, warranties and covenants, including a covenant that we and our subsidiary, Fibrocell Technologies, Inc., shall be prohibited from the incurrence of additional debt without obtaining the consent of 66 2/3% of the New Note holders.

Anti-Takeover Effects of Provisions of Delaware Law

Provisions of Delaware law and our Certificate of Incorporation, as amended, and Bylaws could make the acquisition of our company through a tender offer, a proxy contest or other means more difficult and could make the removal of incumbent officers and directors more difficult. We expect these provisions to discourage coercive takeover practices and inadequate takeover bids and to encourage persons seeking to acquire control of our company to first negotiate with our Board of Directors. We believe that the benefits provided by our ability to negotiate with the proponent of an unfriendly or unsolicited proposal outweigh the disadvantages of discouraging these proposals. We believe the negotiation of an unfriendly or unsolicited proposal could result in an improvement of its terms.

Anti-Takeover Effects of Provisions of Our Charter Documents

Our Certificate of Incorporation, as amended, provides for our Board of Directors to be divided into three classes serving staggered terms. Approximately one-third of the Board of Directors will be elected each year. The provision for a classified board could prevent a party who acquires control of a majority of the outstanding voting stock from obtaining control of the Board of Directors until the second annual stockholders' meeting following the date the acquirer obtains the controlling stock interest. The classified board provision could discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of our company and could increase the likelihood that incumbent directors will retain their positions.

Our Bylaws do not permit stockholders to call a special meeting of stockholders. Our Bylaws provide that special meetings of the stockholders may be called only by a majority of the members of our Board of Directors, our Chairman of the Board of Directors, our Chief Executive Officer or our President. Our Bylaws require that all stockholder actions be taken by a vote of the stockholders at an annual or special meeting, and do not permit our stockholders to act by written consent without a meeting. Our Bylaws provide for an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to the Board of Directors. At an annual meeting, stockholders may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the Board of Directors. Stockholders may also consider a proposal or nomination by a person who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given to our Secretary timely written notice, in proper form, of his, her or its intention to bring that business before the meeting. The Bylaws do not give our Board of Directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting of the stockholders. However, our Bylaws may have the effect of precluding the conduct of business at a meeting if the proper procedures are not followed. These provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

Listing

Our common stock is listed on the OTCBB under the symbol FCSC.

Transfer Agent

The transfer agent for our common stock is American Stock Transfer & Trust Company located at 59 Maiden Lane, New York, New York 11038.

SHARES ELIGIBLE FOR FUTURE SALE

As of May 4, 2010, there were approximately 19,768,676 shares of our common stock outstanding.

Future sales of a substantial number of shares of our common stock in the public market could adversely affect market prices prevailing from time to time. Under the terms of this prospectus, the shares of common stock underlying the Series A Preferred and the warrants may be resold without restriction or further registration under the Securities Act, except that any shares offered by our affiliates, as that term is defined under the Securities Act, may generally only be sold in compliance with Rule 144 under the Securities Act.

Shares Covered by this Prospectus

The following shares may be offered for resale under this prospectus:

up to 5,076,664 shares of common stock issued in our March 4, 2010 Private Offering; and

up to 5,076,664 shares of common stock underlying common stock purchase warrants issued in our March 4, 2010 Private Offering and up to 406,133 shares of common stock underlying the warrants issued to the placement agents in such offering.

All of the shares being registered in this offering may be resold by the investors without restriction under the Securities Act.

Rule 144

The SEC adopted amendments to Rule 144 which became effective on February 15, 2008, and apply to securities acquired both before and after that date. Under these amendments, a person who has beneficially owned restricted shares of our common stock for at least six months would be entitled to sell their securities provided that (i) such person is not deemed to have been one of our affiliates at the time of, or at any time during the three months

preceding, a sale and (ii) we are subject to the Exchange Act periodic reporting requirements for at least three months before the sale.

Of the 19,768,676 shares of our common stock issued and outstanding as of April 5, 2010, a total of 600,000 shares are deemed control securities, within the meaning of Rule 144. Absent registration under the Securities Act, the sale of such shares is subject to Rule 144, as promulgated under the Securities Act. Similarly, any shares we issue as dividends on the Series A Preferred are deemed restricted securities under Rule 144 and may only be sold in compliance with Rule 144. The remainder of our outstanding shares may be sold without limitation or restriction.

Sales under Rule 144 by Affiliates

Persons who have beneficially owned restricted shares of our common stock for at least six months but who are our affiliates at the time of, or at any time during the three months preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of either of the following:

(a) 1% of the number of shares of common stock then outstanding, which will equal 197,687 shares as of the date of this prospectus; or

(b) if the common stock is listed on a national securities exchange, the average weekly trading volume of the common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

However, since our shares are quoted on the OTCBB, our stockholders will not be able to rely on the market-based volume limitation described in the second bullet above. If, in the future, our securities are listed on an exchange, then our stockholders would be able to rely on the market-based volume limitation. Unless and until our stock is so listed or quoted, our stockholders can only rely on the percentage based volume limitation described in the first bullet above.

Such sales by affiliates must also comply with the manner of sale, current public information and notice provisions of Rule 144. The selling stockholders will not be governed by the foregoing restrictions when selling their shares pursuant to this prospectus.

Sales Under Rule 144 by Non-Affiliates

Under Rule 144, a person who is not deemed to have been one of our affiliates at the time of or at any time during the three months preceding a sale, and who has beneficially owned their shares proposed to be sold for at least six months, including the holding period of any prior owner other than an affiliate, is entitled to sell their shares without complying with the manner of sale and volume limitation or notice provisions of Rule 144. We must be current in our public reporting if the non-affiliate is seeking to sell under Rule 144 after holding his shares between six months and one year. After one year, non-affiliates do not have to comply with any other Rule 144 requirements.

The possibility that substantial amounts of our common stock may be sold under Rule 144 into the public market may adversely affect prevailing market prices for the common stock and could impair our ability to raise capital in the future through the sale of equity securities.

SELLING SECURITY HOLDERS

The following table presents information regarding the Selling Stockholders. The percentage of outstanding shares beneficially owned is based on 19,768,676 shares of common stock issued and outstanding on May 4, 2010. Beneficial ownership is determined in accordance with Rule 13d-3 under the Exchange Act. As to each person or entity named as beneficial owners, that person's or entity's percentage of ownership is determined based on the assumption that any warrants or convertible securities held by such person or entity which are exercisable or convertible within 60 days of the date of this report have been exercised or converted, as the case may be.

The warrants issued in the March 2010 offering each provide that at no time may a holder exercise the warrants if the number of shares of common stock to be issued pursuant to such exercise would exceed, when aggregated with all other shares of common stock owned by such holder at such time, the number of shares of common stock which would result in such holder beneficially owning (as determined in accordance with Section 13(d) of the Exchange Act and the rules thereunder) in excess of 9.98% of the then issued and outstanding shares of our common stock; provided, however, that upon the holder providing us with 61 days notice that such holder would like to waive this provision then this provision will be of no force or effect; provided, further, that this provision will be of no force or effect during the 61 days immediately preceding the expiration of the warrants.

Except as may be otherwise described below, to the best of our knowledge, the named Selling Stockholder beneficially owns and has sole voting and investment authority as to all of the shares set forth opposite his name, none of the selling stockholders is known to us to be a registered broker-dealer or an affiliate of a registered broker-dealer, and none of the Selling Stockholders has not held any position or office, or has had any material relationship with us or any of our affiliates within the past three years. Each of the Selling Stockholders has acquired his, her or its shares solely for investment and not with a view to or for resale or distribution of such securities.

Information with respect to beneficial ownership is based upon information provided to us by the Selling Stockholders. For purposes of presentation, we have assumed that the Selling Stockholders will sell all shares offered hereby, including the shares issuable on the exercise of warrants.

Name of Selling Stockholders	No. of Shares of Common Stock Owned	No. of Shares Issuable Upon Exercise of the Warrants Owned	Approximate Percentage of Issued and Outstanding Shares	Number of Shares Registered and To Be Sold In This Offering	Number Of Shares To Be Beneficially Owned After The Offering	Approximate Percentage of Shares To Be Owned After the Offering
			Prior to the Offering			
Straus Healthcare Partners, L.P.	931,623(2)	560,666(2)	7.18%	666,666	825,623	4.04%
Margus Ehatamm & Sarah Ehatamm	20,000	20,000	*	40,000		
Deerfield Special Situations Fund, LP (3)	708,000 1,292,000	708,000 1,292,000	6.92% 9.98%(3)	1,416,000 2,584,000		

Deerfield Special
Situations Fund Intl
(3)

Name of Selling	No. of Shares of Common Stock Owned	No. of Shares Issuable Upon Exercise of the Warrants Owned	Approximate Percentage of Issued and Outstanding Shares Beneficially Owned Prior to the	Number of Shares Registered and To Be Sold In This	Number Of Shares To	
					Be Beneficially Owned After The	Approximate Percentage of Shares To Be Owned After the
Stockholders	Offering (1)	Offering	Offering	Offering	Offering	Offering
MOG Capital, LLC (4)	2,000,000(5)	1,333,333(5)	9.98%(3)	1,333,334	1,999,333	9.19%
Robert Sagarino	165,333	165,333	1.66%	330,666		
Stephen M. Karlya	6,100	6,100	*	12,200		
Fergus McGovern	768,628	333,333	5.48%	666,666	435,295	2.20%
Robert Siegal	33,333	33,333	*	66,666		
Peter Bowden	697,752	200,000	4.50%	400,000	497,752	2.52%
Denis Bowden	688,589	200,000	4.45%	400,000	488,589	2.47%
Jerry and Janet Magro	19,700	14,000	*	28,000	5,700	*
Raymond Cincotti	14,000	14,000	*	28,000		
David Boral	12,567	269,128(6)	1.41%	73,362	208,333	1.04%
David Batista	33,333	696,505(7)	3.57%	221,505	508,333	2.51%
George Carris	33,333	953,066(8)	4.76%	269,732	716,667	3.50%
Jane Scotti Bowden Transportation Services Ltd. (9)	200,000	200,000	2.00%	400,000		
Anthony V. Milone	1,151,548	133,333	6.46%	266,666	1,018,215	5.15%
David Speciale	73,333	73,333	*	146,666		
Margery Scotti	6,667	6,667	*	13,334		
Gavin Scotti	266,666(10)	200,001(10)	2.32%	266,666	200,001	1.00%
Super-Tek, Inc.	133,333	133,333	1.34%	266,666		
Anthony Milone Profit Sharing Plan	271,333	271,333	2.71%	542,666		
	60,000	60,000	*	120,000		

* Stockholder owns less than 1%

(1) The Selling Stockholders

and any broker-dealers or agents that are involved in selling these shares are deemed to be underwriters within the meaning of the Securities Act for such sales.

An underwriter is a person who has purchased shares from an issuer with a view towards distributing the shares to the public. 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 considered to be underwriting commissions or discounts under the Securities Act.

- (2) The number of shares listed consists of
 - (i) 476,956 shares of common stock (including 333,333 shares of common stock that were acquired in our March 4, 2010

Private Offering
being registered
in this
prospectus), and
(ii) 454,667
shares
underlying our
Series A
Preferred stock.
The number of
warrants listed
consists of
(i) warrants to
purchase
333,333 shares
of common
stock that were
acquired in our
March 4, 2010
Private Offering
being registered
in this
prospectus, and
(ii) warrants to
purchase
227,333 shares
acquired in our
Series A
Preferred stock
offering.
Ravinder
Holder, general
partner of the
selling
stockholder,
holds voting and
dispositive
power over the
securities held
by the selling
stockholder.

- (3) James E. Flynn exercises voting and dispositive power over the securities held by Deerfield Special Situations Fund, L.P. and Deerfield Special Situations Fund International, Limited. The warrants issued in the March 2010 offering provide that at no time may a holder exercise the warrants if the number of shares of common stock to be issued pursuant to such exercise would exceed, when aggregated with all other shares of common stock owned by such holder at such time, the number of shares of common stock which would result in such holder beneficially owning (as determined in accordance with Section 13(d) of the Exchange Act and the rules thereunder) in

excess of 9.98% of the then issued and outstanding shares of our common stock; provided, however, that upon the holder providing us with 61 days notice that such holder would like to waive this provision then this provision will be of no force or effect; provided, further, that this provision will be of no force or effect during the 61 days immediately preceding the expiration of the warrants.

- (4) MOG Capital, LLC is a registered broker dealer. The registrable securities were acquired in the ordinary course of business and not as compensation for investment banking services. Accordingly, the selling security holder is an underwriter within the meaning of Section 2(a)(11) of the Securities

Act under the interpretations of the SEC. Jason Adler, in his capacity as managing member of MOG Capital, LLC has voting and dispositive power over the securities held by MOG Capital, LLC. Mr. Adler disclaims beneficial ownership of such securities.

- (5) The number of shares listed consists of
- (i) 666,667 shares of common stock that were acquired in our March 4, 2010 Private Offering being registered in this prospectus, and
 - (ii) 1,333,333 shares underlying our Series A Preferred stock.
- The number of warrants listed consists of (i) warrants to purchase 666,667 shares of common stock that were acquired in our March 4, 2010 Private Offering being registered in this

prospectus, and
(ii) warrants to
purchase
666,666 shares
acquired in our
Series A
Preferred stock
offering.

- (6) Consists of
(i) warrants to
purchase 12,567
shares of
common stock
that were
acquired in our
March 4, 2010
Private Offering
being registered
in this
prospectus,
(ii) warrants to
purchase 48,228
shares of
common stock
being registered
in this
prospectus,
(iii) an option to
purchase
100,000 shares
of common
stock at \$0.75
per share, and
(iv) warrants to
purchase
108,333 shares
of common
stock. The
warrants set
forth in (ii) were
issued by us to
our placement
agent in
connection with
the March 2010
offering.
Mr. Boral is an
affiliate of the
placement agent.

- (7) Consists of
- (i) warrants to purchase 33,333 shares of common stock that were acquired in our March 4, 2010 Private Offering being registered in this prospectus,
 - (ii) warrants to purchase 154,839 shares of common stock being registered in this prospectus,
 - (iii) an option to purchase 400,000 shares of common stock at \$0.75 per share, and
 - (iv) warrants to purchase 108,333 shares of common stock. The warrants set forth in (ii) were issued by us to our placement agent in connection with the March 2010 offering. Mr. Batista is an affiliate of the placement agent.
- (8) Consists of
- (i) warrants to purchase 33,333 shares of common stock that were acquired in our March 4, 2010 Private Offering

being registered in this prospectus, (ii) warrants to purchase 203,066 shares of common stock being registered in this prospectus, (iii) an option to purchase 500,000 shares of common stock at \$0.75 per share, and (iv) warrants to purchase 216,667 shares of common stock. The warrants set forth in (ii) were issued by us to our placement agent in connection with the March 2010 offering. Mr. Carris is an affiliate of the placement agent.

- (9) Peter Bowden holds voting and dispositive power over the securities held by the selling stockholder.
- (10) The number of shares listed consists of (i) 133,333 shares of common stock that were acquired in our March 4, 2010 Private Offering

being registered
in this
prospectus, and
(ii) 133,333
shares
underlying our
Series A
Preferred stock.
The number of
warrants listed
consists of
(i) warrants to
purchase
133,333 shares
of common
stock that were
acquired in our
March 4, 2010
Private Offering
being registered
in this
prospectus, and
(ii) warrants to
purchase 66,668
shares acquired
in our Series A
Preferred stock
offering.

We may require the Selling Stockholders to suspend the sales of the securities offered by this prospectus upon the occurrence of any event that makes any statement in this prospectus or the related registration statement untrue in any material respect or that requires the changing of statements in these documents in order to make statements in those documents not misleading.

PLAN OF DISTRIBUTION

Each Selling Stockholder of the common stock 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 covered hereby on the principal trading market or any other 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 Stockholder 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;

in transactions through broker-dealers that agree with the Selling Stockholders to sell a specified number of such shares at a stipulated price per share;

through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;

a combination of any such methods of sale; or

any other method permitted pursuant to applicable law.

The Selling Stockholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholders (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 FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

In connection with the sale of the common stock or interests therein, the Selling Stockholders 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 Stockholders 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 Stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create 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 Stockholders 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 Stockholder has

informed the Company 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 8%.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the shares. The Company has agreed to indemnify the Selling Stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because Selling Stockholders 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 including Rule 172 thereunder. The Selling Stockholders have advised us that there is no underwriter or coordinating broker acting in connection with the proposed sale of the resale shares by the Selling Stockholders.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the shares may be resold by the Selling Stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the shares have been sold pursuant to this 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 of Common Stock covered hereby 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 Stockholders 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 Stockholders or any other person. We will make copies of this prospectus available to the Selling Stockholders 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 (including by compliance with Rule 172 under the Securities Act).

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

We incorporate information into this prospectus by reference, which means that we disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, except to the extent superseded by information contained herein. We incorporate by reference the documents listed below that have been previously filed with the SEC:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2009, which we filed with the SEC on March 31, 2010; and

our Current Reports on Form 8-K, which we filed with the SEC on February 1, 2010, March 3, 2010 and April 6, 2010.

We do not incorporate by reference documents or information furnished to, but not filed with, the SEC.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, upon written or oral request, a copy of the reports and documents that have been incorporated by reference in this prospectus, at no cost. Any such request may be made by writing or telephoning us at the following address or phone number:

Fibrocell Science, Inc.
405 Eagleview Boulevard
Exton, Pennsylvania 19341
(484) 713-6000

Attention: Corporate Secretary

These documents can also be requested through, and are available in, the Investors section of our website, which is located at www.fibrocellscience.com, or as described under Where You Can Find More Information below. The information and other content contained on or linked from our internet website are not part of this prospectus.

EXPERTS

The financial statements as of December 31, 2009 (Successor) and 2008 (Predecessor as described in Note 1 of the notes to the consolidated financial statements incorporated herein by reference) and for the year ended December 31, 2008 (Predecessor), for the period from January 1, 2009 to August 31, 2009 (Predecessor) and for the period from the Successor s inception (September 1, 2009) through December 31, 2009 and included in this Prospectus and in the Registration Statement have been so included in reliance on the report of BDO Seidman, LLP, an independent registered public accounting firm, the report on the financial statements contains an explanatory paragraph regarding the Company s ability to continue as a going concern, appearing elsewhere herein and in the Registration Statement, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the common stock offered in this offering. This prospectus does not contain all of the information set forth in the registration statement. For further information with respect to us and the common stock offered in this offering, we refer you to the registration statement and to the attached exhibits. With respect to each such document filed as an exhibit to the registration statement, we refer you to the exhibit for a more complete description of the matters involved.

You may inspect our registration statement and the attached exhibits and schedules without charge at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may obtain

copies of all or any part of our registration statement from the SEC upon 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.

Our SEC filings, including the registration statement and the exhibits filed with the registration statement, are also available from the SEC's website at www.sec.gov, which contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses, other than underwriting discounts, payable by the registrant in connection with the sale of the shares of common stock being registered. All amounts are estimates except the fees payable to the SEC.

SEC Registration Fee	\$ 752.89
Accounting Fees and Expenses	\$ 5,000
Legal Fees and Expenses	\$ 5,000
Miscellaneous	\$ 1,000
Total	\$ 11,752.89

Item 14. Indemnification of Directors and Officers

Fibrocell's Certificate of Incorporation and Bylaws authorize it to indemnify directors, officers, employees and agents of Fibrocell against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement, actually and reasonably incurred in connection with any action, suit or proceeding, if the party to be indemnified acted in good faith and in a manner that he reasonably believed to be in or not opposed to the best interests of Fibrocell, and, with respect to any criminal action or proceeding, such party had no reasonable cause to believe his conduct was unlawful. The Certificate of Incorporation and the Bylaws of Fibrocell also authorize it to indemnify directors, officers, employees and agents of Fibrocell who are or were a party to or threatened to be a party to, any threatened, pending, or completed action or suit by or in the right of Fibrocell to procure a judgment in its favor by reason of the fact the he was a director, officer, employee or agent of Fibrocell or of another entity at the request of Fibrocell, against expenses (including reasonable attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of Fibrocell, except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged liable to Fibrocell unless and to the extent that the court in which such suit or action was brought shall determine on application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper.

The Bylaws also permit Fibrocell to enter into indemnity agreements with individual directors, officers, employees, and other agents. Fibrocell reserves the right to enter into such agreements with its directors and executive officers effective upon the closing of this offering. These agreements, together with the Bylaws and Certificate of Incorporation, may require Fibrocell, among other things, to indemnify directors or officers against certain liabilities that may arise by reason of their status or service as directors (other than liabilities resulting from willful misconduct of a culpable nature), to advance expenses to them as they are incurred, provided that they undertake to repay the amount advanced if it is ultimately determined by a court that they are not entitled to indemnification, and to obtain and maintain directors' and officers' insurance if available on reasonable terms.

Fibrocell's Certificate of Incorporation provides that directors shall have no personal liability to Fibrocell or its stockholders for monetary damages for breach of fiduciary duty as a director, except (i) for any breach of a director's duty of loyalty to Fibrocell or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under section 174 of the General Corporation Law of Delaware as it may from time to time be amended or any successor provision thereto, or (iv) for any transaction from which a director derived an improper personal benefit.

Fibrocell currently has directors' and officers' liability insurance. Delaware General Corporation Law, Section 145, and the Certificate of Incorporation and Bylaws of Fibrocell provide for the indemnification of officers, directors and other corporate agents in terms sufficiently broad to indemnify such persons, under certain circumstances, for liabilities (including reimbursement of expenses incurred) arising under the Securities Act. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons pursuant to the foregoing provisions, or

otherwise, Fibrocell has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Item 15. Recent Sales of Unregistered Securities

On August 27, 2009, the United States Bankruptcy Court for the District of Delaware in Wilmington entered an order, or Confirmation Order, confirming the Joint First Amended Plan of Reorganization dated July 30, 2009, as supplemented by the Plan Supplement dated August 21, 2009, or the Plan, of Isolagen, Inc. and Isolagen's wholly owned subsidiary, Isolagen Technologies, Inc. The effective date of the Plan was September 3, 2009.

Pursuant to the Plan, all Isolagen equity interests, including without limitation its common stock, options and warrants outstanding as of the effective date were cancelled. On the effective date, Fibrocell completed an exit financing of common stock in the amount of \$2 million. Fibrocell issued the following shares of common stock pursuant to the Plan:

7,320,000 shares, to its pre-bankruptcy lenders and the lenders that provided its debtor-in-possession facility, collectively;

3,960,000 shares, to the holders of the 3.5% convertible subordinated notes issued by Isolagen;

600,000 shares, to its management as of the effective date, which was its chief operating officer;

120,000 shares, to the holders of its general unsecured claims; and

2,666,666 shares, to the purchasers of shares in the exit financing (its pre-bankruptcy lenders, the lenders that provided the debtor-in-possession facility and the holders of the 3.5% convertible subordinated notes were permitted to participate in the exit financing).

The common stock issued pursuant to the Plan was issued pursuant to Section 1145 of the United States Bankruptcy Code, which exempts the issuance of securities from the registration requirements of the Securities Act of 1933, as amended (Securities Act).

A condition precedent to Fibrocell's exit from bankruptcy was that it execute an investment banking agreement with John Carris Investments LLC and Viriathus Capital LLC. In connection with this agreement, Fibrocell was required to pay a retainer, which consisted in part of the issuance of options to purchase an aggregate of 1,000,000 shares of common stock at \$0.75 per share. These securities were issued pursuant to the exemption from registration permitted under Section 4(2) of the Securities Act.

In October 2009, the Series A Preferred and the Class A and Class B warrants were sold in a transaction exempt from registration under the Securities Act, in reliance on Section 4(2) thereof and Rule 506 of Regulation D thereunder. Each purchaser represented that it was an accredited investor as defined in Regulation D.

In October 2009, Fibrocell entered into two consulting agreements with two individuals. Fibrocell issued the two consultants options to purchase 200,000 shares and 150,000 shares, respectively. The options have an expiration date five years from the date of issuance and an exercise price of \$0.75 per share. The options were issued in a transaction exempt from registration under the Securities Act of 1933, in reliance on Section 4(2) thereof.

In March 2010, Fibrocell sold the common stock and warrant being registered in this registration statement in a transaction exempt from registration under the Securities Act, in reliance on Section 4(2) thereof and Rule 506 of Regulation D thereunder. Each purchaser represented that it was an accredited investor as defined in Regulation D.

Item 16. Exhibits and Financial Statement Schedules

Exhibit Number	Description
2.1	Debtors First Amended Joint Plan of Reorganization dated July 30, 2009 and Disclosure Statement (filed as Exhibit 10.2 to the Company's Form 10-Q for quarter ended June 30, 2009, filed on August 12, 2009 and as Exhibit 99.1 to our Form 8-K filed September 2, 2009)
3.1	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to our Form 8-K filed September 2, 2009)
3.2	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to our Form 8-K filed September 2, 2009)
3.3	Certificate of Designation of Preferences, Rights and Limitations of Series A 6% Convertible Preferred Stock (incorporated by reference to Exhibit 3.1 to our Form 8-K filed October 14, 2009)
4.1	Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 to our Form 10-Q filed November 23, 2009)
4.2	Form of Class A/B Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.1 to our Form 8-K filed October 14, 2009)
4.3	Form of 12.5% Promissory Note (incorporated by reference to Exhibit 10.1 to our Form 8-K filed September 10, 2009)
4.4	Form of Placement Agent Warrant (incorporated by reference to Exhibit 4.2 to our Form 10-Q filed November 23, 2009)
4.5	Common Stock Purchase Warrant issued in March 2010 offering (incorporated by reference to Exhibit 4.1 to our Form 8-K filed March 3, 2010)
5	Opinion of Cozen O'Connor
10.1	Securities Purchase Agreement dated October 13, 2009 between the Company and the Series A Preferred Stock Purchasers (incorporated by reference to Exhibit 10.1 to our Form 8-K filed October 14, 2009)
10.2	Employment Agreement between the Company and Declan Daly (incorporated by reference to Exhibit 10.1 to our Form 10-Q filed November 23, 2009)
10.3	Consulting Agreement between the Company and Robert Langer (incorporated by reference to Exhibit 10.2 to our Form 10-Q filed November 23, 2009)
10.4	2009 Equity Incentive Plan (incorporated by reference to Exhibit 10.3 to our Form 10-Q filed November 23, 2009)
10.5	Lease Agreement between Isolagen, Inc and The Hankin Group dated April 7, 2005 (previously filed as an exhibit to the company's Form 8-K, filed on April 12, 2005)
10.6	

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Purchase Option Agreement between Isolagen, Inc and 405 Eagleview Associates dated April 7, 2005 (previously filed as an exhibit to the company s Form 8-K, filed on April 12, 2005)

- 10.7 Intellectual Property Purchase Agreement between Isolagen Technologies, Inc., Gregory M. Keller, and PacGen Partners (previously filed as an exhibit to the company s amended Form S-1, as filed on October 24, 2003)
- 10.8 Employment Agreement between the Company and David Pernock (incorporated by reference to Exhibit 10.1 to our Form 8-K filed February 1, 2010)
- 10.9 Registration Rights Agreement between the Company and the Series A Preferred Stock Purchasers, dated October 13, 2009 (incorporated by reference to Exhibit 10.2 to our Form 8-K filed October 14, 2009)
- 10.10 Securities Purchase Agreement dated March 2, 2010 (incorporated by reference to Exhibit 10.1 to our Form 8-K filed March 3, 2010)
- 10.11 Registration Rights Agreement dated March 2, 2010 (incorporated by reference to Exhibit 10.1 to our Form 8-K filed March 3, 2010)

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Exhibit Number	Description
21	List of Subsidiaries (previously filed as an exhibit to the company's Annual Report on Form 10-K for the fiscal year ended December 31, 2006)
*23.1	Consent of BDO Seidman, LLP
23.2	Consent of Cozen O'Connor (included in Exhibit 5)
24.1	Power of Attorney (included on signature page)

* Filed herewith.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

1. To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

- i. To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
- ii. To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement.

iii. To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided however, That:

A. Paragraphs (1)(i), (1)(ii) and (1)(iii) of this section do not apply if the registration statement is on Form S-3 or Form F-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

2. That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be 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. To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

4. That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

i. If the registrant is relying on Rule 430B:

A. Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

B. Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule

415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

ii. If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

5. That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

i. Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

ii. Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

iii. The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

iv. Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

6. The undersigned registrant hereby undertakes to deliver or cause to be delivered with the prospectus, to each person to whom the prospectus is sent or given, the latest annual report to security holders that is incorporated by reference in the prospectus and furnished pursuant to and meeting the requirements of Rule 14a-3 or Rule 14c-3 under the Securities Exchange Act of 1934; and, where interim financial information required to be presented by Article 3 of Regulation S-X are not set forth in the prospectus, to deliver, or cause to be delivered to each person to whom the prospectus is sent or given, the latest quarterly report that is specifically incorporated by reference in the prospectus to provide such interim financial information.

7. 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. 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.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Exton, Commonwealth of Pennsylvania, on May 7, 2010.

FIBROCELL SCIENCE, INC.

By: /s/ Declan Daly
 Name: **Declan Daly**
 Title: **Chief Financial Officer, Chief
 Operating Officer and Controller**

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date
/s/ Declan Daly	Director, Chief Financial Officer, Chief Operating Officer and Controller	May 7, 2010
Declan Daly		
*	Chairman of the Board and Chief Executive Officer	May 7, 2010
David Pernock		
*	Director	May 7, 2010
Paul Hopper		
*	Director	May 7, 2010
Kelvin Moore		
*	Director	May 7, 2010
Robert Langer		

EXHIBIT INDEX

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