

CALGON CARBON CORPORATION

Form 424B3

July 19, 2007

Table of Contents

Filed Pursuant to Rule 424(b)(3)
Registration No. 333-144463

Prospectus

Calgon Carbon Corporation

\$75,000,000

5.00% Convertible Senior Notes due 2036

Interest payable February 15 and August 15

Issue Price: 100%

On August 18, 2006, we issued \$75,000,000 aggregate principal amount of 5.00% Convertible Senior Notes due 2036 in a private offering. This prospectus covers resales from time to time by selling securityholders of any or all of their notes, including the related guarantees, and shares of our common stock into which the notes are convertible. We will not receive any proceeds from the resale by the selling securityholders of the notes or the shares of common stock hereunder.

The notes bear interest at a rate of 5.00% per year. Interest on the notes accrues from August 18, 2006. Interest is payable semiannually in arrears on February 15 and August 15 of each year, beginning February 15, 2007. The notes will mature on August 15, 2036.

Prior to June 15, 2011, holders may convert their notes under the following circumstances: (1) during any calendar quarter (and only during such calendar quarter) commencing after September 30, 2006, if the last reported sale price of our common stock is greater than or equal to 120% of the conversion price of the notes for at least 20 trading days in the period of 30 consecutive trading days ending on the last trading day of the preceding calendar quarter; (2) during the five business day period after any 10 consecutive trading-day period (the measurement period) in which the trading price per note for each day in the measurement period was less than 103% of the product of the last reported sale price of our common stock and the conversion rate on such day; or (3) upon the occurrence of specified corporate transactions described in this prospectus. On or after June 15, 2011, holders may convert their notes at any time prior to 5:00 p.m., New York City time, on the business day immediately preceding the maturity date. Upon conversion, we will pay cash and shares of our common stock, if any, based on a daily conversion value (as described herein) calculated on a proportionate basis for each day of the 25 trading-day observation period.

The initial conversion rate is 196.0784 shares of our common stock per \$1,000 principal amount of notes, equivalent to an initial conversion price of approximately \$5.10 per share of common stock. The conversion rate is subject to adjustment in some events but will not be adjusted for accrued interest. In addition, following certain fundamental changes that occur prior to August 15, 2011, we will increase the conversion rate for holders who elect to convert notes in connection with such fundamental changes in certain circumstances.

We may not redeem the notes before August 20, 2011. On or after that date, we may redeem all or a portion of the notes at any time. Any redemption of the notes will be for cash at 100% of the principal amount of the notes to be redeemed, plus accrued and unpaid interest to, but excluding, the redemption date.

Holders may require us to purchase all or a portion of their notes on each of August 15, 2011, August 15, 2016 and August 15, 2026. In addition, if we experience specified types of fundamental changes, holders may require us to purchase the notes. Any repurchase of the notes pursuant to these provisions will be for cash at a price equal to 100%

of the principal amount of the notes to be purchased plus any accrued and unpaid interest to, but excluding, the purchase date.

The notes are our senior unsecured obligations, and rank equally in right of payment with all of our other existing and future senior unsecured indebtedness. The notes are guaranteed by certain of our domestic subsidiaries on a senior unsecured basis. The subsidiary guarantees are general unsecured senior obligations of the subsidiary guarantors and rank equally in right of payment with all of the existing and future senior unsecured indebtedness of the subsidiary guarantors. If we fail to make payment on the notes, the subsidiary guarantors must make them instead. The notes are effectively subordinated to any indebtedness of our non-guarantor subsidiaries. The notes are effectively junior to all of our existing and future secured indebtedness to the extent of the value of the assets securing such indebtedness.

We do not intend to apply for listing of the notes on any securities exchange or for inclusion of the notes in any automated quotation system. The notes originally issued in the private offering are eligible for trading on The PORTALsm Market of the National Association of Securities Dealers, Inc. However, the notes sold pursuant to this prospectus will no longer be eligible for trading in The PORTALsm Market of the National Association of Securities Dealers, Inc.

Our common stock is listed on the New York Stock Exchange under the symbol CCC. The last reported sale price of our common stock on the New York Stock Exchange on July 17, 2007 was \$13.15 per share.

See Risk factors beginning on page 6 for a discussion of certain risks that you should consider in connection with an investment in the notes.

The notes, including the related guarantees, and the common stock may be sold from time to time by the selling securityholders named in this prospectus through public or private transactions, at prevailing market prices or at privately negotiated prices, either directly or through agents or broker-dealers acting as principal or agent. The selling securityholders may engage underwriters, brokers, dealers or agents, who may receive commissions or discounts from the selling securityholders. We will pay substantially all of the expenses incident to the registration of the notes, including the related guarantees, and shares of our common stock, except for the selling commissions, if any. See Plan of Distribution.

The date of this prospectus is July 18, 2007

In making your investment decision, you should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized anyone to provide you with any other information. If anyone provides you with different or inconsistent information, you should not rely on it.

Neither we nor our representatives are making an offer to sell these securities in any jurisdiction where the offer is not permitted.

You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front cover of this prospectus. You should not assume that the information contained in the documents incorporated by reference in this prospectus is accurate as of any date other than the respective dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

TABLE OF CONTENTS

	Page
<u>Calgon Carbon Corporation</u>	1
<u>Summary consolidated financial and operating data</u>	3
<u>Ratios of earnings to fixed charges</u>	5
<u>Risk factors</u>	6
<u>Forward-looking statements</u>	22
<u>Use of Proceeds</u>	23
<u>Description of certain indebtedness</u>	23
<u>Description of notes</u>	28
<u>Description of capital stock</u>	55
<u>Registration rights</u>	62
<u>Selling securityholders</u>	63
<u>Material U.S. federal income and estate tax consequences</u>	68
<u>Plan of distribution</u>	74
<u>Legal matters</u>	76
<u>Experts</u>	76
<u>Available information</u>	77
<u>Incorporation of certain documents by reference</u>	77
<u>Index to financial statements</u>	F-1

Table of Contents

Calgon Carbon Corporation

We are one of the leading global suppliers of activated carbon, producing approximately 130 million pounds annually, or approximately 31% of estimated annual U.S. demand and approximately 11% of estimated global demand. We specialize in the manufacture and supply of activated carbon in granular form, and the design of innovative treatment systems and value-added technologies and services for the purification of water and air and other process streams. We have approximately 850 employees, 16 operational facilities and 23 sales and service centers in North America, Europe and Asia.

Products and services

We offer a diverse range of products, services and equipment specifically developed for the purification, separation and concentration of liquids and gases through three business segments.

Activated Carbon and Service segment 84% of 2006 net sales

The Activated Carbon and Service segment primarily consists of activated carbon products and field services, including reactivation. The sale of activated carbon is the principal component of this business segment. We produce and sell a broad range of activated carbons, in granular, powdered or pellet form. Activated carbon is a porous material that removes organic compounds from liquids and gases by a process known as adsorption. In adsorption, organic molecules contained in a liquid or gas are attracted and bound to the surface of the pores of the activated carbon as the liquid or gas is passed through. We also have a patented manufacturing process which enhances the catalytic functionality of activated carbon, expanding its capability to remove inorganic compounds; the product was introduced in 1994 and is called Centaur®.

The primary raw material used in the production of our activated carbons is bituminous coal which is crushed, mixed with pitch, sized and processed in low temperature bakers followed by high temperature furnaces. This heating process is known as activation and develops the pore structure of the carbon. Through adjustments in the activation process, pores of the required size for a particular purification application are developed. Our technological expertise in adjusting the pore structure in the activation process has been one of the factors that has enabled us to develop many special types of activated carbon.

We also market lower priced, lower value-added activated carbon produced by other suppliers outside the United States, principally in China, as well as activated carbons made from other raw materials, including coconut or wood, produced by industry partners and suppliers.

The other significant component of this business segment is the reactivation of activated carbons. Reactivation is a process by which organic compounds that have been adsorbed by the carbon are destroyed. The process entails passing the spent activated carbon through a high temperature furnace. The reactivated carbon can then be re-used. Our reactivation service includes handling and transportation of the activated carbon. Another component of this business segment is various services associated with the supply of media, such as activated carbon, ion exchange resins and anthracite, among others and systems for purification, separation and concentration as well as the supply of equipment through leasing arrangements.

Table of Contents

These services are particularly suited for treating fluids at a customer's facility containing hazardous or non-hazardous organic compounds.

We also provide a perchlorate removal service for groundwater treatment which utilizes ion exchange resins and equipment. This service includes feasibility studies, process and equipment design, assembly and supply of systems with a selected ion exchange resin, treatment services and major maintenance of Company owned equipment. We also provide resin exchange service along with disposal of the spent resins.

We lease a line of adsorption and filtration equipment to clean water from contaminated aquifers and industrial wastewater and surface impoundments, and other equipment to purify gases and liquids in industrial process applications.

Our purification services are used to improve the quality of food, chemical, pharmaceutical, and petrochemical products. Such services may be utilized in permanent installations or in temporary applications, as pilot studies for new manufacturing processes or recovery of off-specification products.

Equipment segment 12% of 2006 net sales

We design and sell equipment which employs activated carbon and ion exchange resins for purification, separation and concentration, and proprietary ion exchange technology based continuous ion exchange units for the purification of many products in the food, pharmaceutical and biotechnology industries. We also provide a wide range of odor control equipment that utilizes catalytic or activated carbon to control odors at municipal wastewater treatment facilities and pumping stations.

Our ultraviolet (UV) light equipment is effective for disinfecting both drinking water and wastewater. In drinking water, UV light alters the DNA of pathogens, such as Cryptosporidium and Giardia, making it impossible for them to reproduce and infect humans. Our drinking water disinfection product line is designed to protect municipal drinking water supplies from such pathogens. Our wastewater disinfection product line is designed to disinfect municipal wastewater. In addition, UV light is effective in combination with hydrogen peroxide in destroying many contaminants common in groundwater remediation applications via our advanced oxidation equipment.

Consumer segment 4% of 2006 net sales

The primary product offered in the Consumer segment is carbon cloth, which is activated carbon in cloth form. Carbon cloth is sold to the medical, industrial and military markets.

Activated carbon and carbon cloth are used as the primary raw material in our consumer home products group. We currently have two primary product lines that we market to the retail market. The first product line, PreZerve® storage products, uses carbon cloth to protect and preserve jewelry and keepsakes from deterioration. The second product line, AllGone™, is an odor elimination system that utilizes activated carbon discs to adsorb odors and impurities from the air safely and naturally.

Our principal executive offices are located at 400 Calgon Carbon Drive, Pittsburgh, PA 15230-0717, and our telephone number is (412) 787-6700. Our website is www.calgoncarbon.com. The information on our website is not part of this prospectus.

Table of Contents

Summary consolidated financial and operating data

The following summary consolidated financial and operating data as of December 31, 2006 and for the years ended December 31, 2004, 2005 and 2006 have been derived from our audited consolidated financial statements included elsewhere in this prospectus. The following summary consolidated financial and operating data as of March 31, 2007 and for the three months ended March 31, 2006 and March 31, 2007 have been derived from our unaudited condensed consolidated financial statements incorporated by reference in this prospectus.

In the opinion of management, the unaudited condensed consolidated financial statements as of March 31, 2007 and for the three months ended March 31, 2006 and March 31, 2007 have been prepared on a basis consistent with the audited consolidated financial statements. In the opinion of management, such unaudited condensed consolidated financial statements include all adjustments, which are normal and recurring adjustments, necessary for a fair presentation of our financial position and results of operations as of and for these periods. Operating results for the three months ended March 31, 2007 are not necessarily indicative of the results that may be expected for any corresponding interim period or for the year ending December 31, 2007.

The following summary consolidated financial and operating data should be read together with, and are qualified by reference to, our audited Consolidated Financial Statements, including the accompanying notes, included elsewhere in this prospectus and Selected Financial Data and Management's Discussion and Analysis of Financial Condition and Results of Operations appearing in our Annual Report on Form 10-K for the fiscal year ended December 31, 2006, and our unaudited condensed consolidated financial statements, including the accompanying notes, appearing in our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2007, which are incorporated by reference into this prospectus.

Table of Contents

(in thousands, except per share amounts and ratios)	Year ended December 31,			Three months ended	
	2004	2005	2006	2006	March 31, (unaudited) 2007
Income Statement Data:					
Net sales	\$ 295,877	\$ 290,835	\$ 316,122	\$ 76,579	\$ 83,030
Cost of products sold (excluding depreciation)	207,523	215,330	236,673	57,411	58,424
Depreciation and amortization	22,004	21,042	18,933	4,798	4,261
Selling, general and administrative expenses	54,543	59,547	62,003	14,372	14,606
Research and development expenses	3,801	4,506	4,248	1,197	828
(Gain) loss from insurance settlement		1,000	(8,072)		
Goodwill impairment charge			6,940		
Gulf Coast facility impairment charge		2,158			
Restructuring charges		412	7	6	
Income (loss) from continuing operations	8,006	(13,160)	(4,610)	(1,205)	4,911
Interest income	697	719	822	86	302
Interest expense	(3,409)	(4,891)	(5,977)	(1,574)	(1,450)
Other expense net	(3,238)	(2,138)	(2,209)	(844)	(403)
Income (loss) from continuing operations before income taxes, equity in income (loss), and minority interest	2,056	(19,470)	(11,974)	(3,537)	3,360
Income tax (benefit) provision	(846)	(9,688)	(2,676)	(345)	2,380
Income (loss) from continuing operations before equity in income (loss) and minority interest	2,902	(9,782)	(9,298)	(3,192)	980
Equity in income (loss) of equity investments	1,000	(725)	286	203	1,054
Minority interest	66				
Income (loss) from continuing operations	3,968	(10,507)	(9,012)	(2,989)	2,034
Income from discontinued operations	1,920	3,091	1,214	1,575	
Net income (loss)	5,888	(7,416)	(7,798)	(1,414)	2,034
Other comprehensive income (loss), net of tax provision (benefit) of \$(816), \$(3,019) and \$2,752, respectively	3,939	(9,811)	9,238		
Comprehensive income (loss) (2006 restated)	\$ 9,827	\$ (17,227)	\$ 1,440		

Basic and diluted earnings per share:					
Income (loss) from continuing operations	\$ 0.10	\$ (0.27)	\$ (0.23)	\$ (0.08)	\$ 0.05
Income from discontinued operations	\$ 0.05	\$ 0.08	\$ 0.03	\$ 0.04	\$ 0.00
Net income (loss)	\$ 0.15	\$ (0.19)	\$ (0.20)	\$ (0.04)	\$ 0.05
Weighted average shares outstanding:					
Basic	39,054	39,615	39,927	39,855	40,225
Diluted	39,456	39,615	39,927	39,855	42,661
Other Financial Data:					
Capital expenditures	\$ 12,413	\$ 15,996	\$ 12,855	\$ 3,093	\$ 1,965
Net cash provided by (used in) operating activities	20,074	12,840	(5,785)	(4,129)	3,423
Net cash provided by (used in) investing activities	(46,823)	(15,496)	14,210	16,079	(1,818)
Net cash provided by (used in) financing activities	26,510	(1,180)	(8,733)	(12,399)	975

Table of Contents

(In thousands, except par value and number of shares)	December 31, 2006	March 31, 2007 (unaudited)
Balance Sheet Data:		
Cash and cash equivalents	\$ 5,631	\$ 8,898
Inventories	70,339	59,792
Total assets	322,364	323,521
Total debt (including current portion of long-term debt):		
Revolving credit facility		
5.00% Convertible Senior Notes due 2036(1)	71,911	72,056
Other debt	2,925	3,829
Total debt	74,836	75,885
Other liabilities	99,655	99,450
Total liabilities	\$ 174,491	\$ 175,335
Shareholders' equity:		
Preferred stock, \$.01 par value, 5,000,000 shares authorized, no shares issued		
Common stock, \$.01 par value, 100,000,000 shares authorized, 42,550,290 and 42,550,290 shares issued, respectively(2)	425	425
Additional paid-in capital	70,851	71,274
Retained earnings	94,035	91,731
Accumulated other comprehensive income	10,305	12,067
Deferred compensation	(506)	
Treasury stock, at cost, 2,819,690 and 2,842,390 shares, respectively	(27,237)	(27,311)
Total shareholders' equity	\$ 147,873	\$ 148,186

(1) Includes debt discount of \$3,089,000 and \$2,943,000 as of December 31, 2006 and March 31, 2007, respectively.

(2) Excludes (i) 1,982,000 and 1,914,150 shares issuable upon exercise of options outstanding as of December 31, 2006 and March 31, 2007, respectively (having a weighted average exercise price of \$6.69 per share and \$6.61 per share, respectively), under our Employee Stock Option Plan, (ii) 510,257 and 510,257 shares issuable upon exercise of options outstanding as of December 31, 2006 and March 31, 2007, respectively (having a weighted average exercise price of \$7.16 per share and \$7.16 per share, respectively), under our 1993 Non-Employee Directors' Stock Option Plan and (iii) shares issuable upon conversion of the notes offered hereby.

Ratios of Earnings to Fixed Charges

Our consolidated ratios of earnings to fixed charges for the years ended December 31, 2002, 2003, 2004, 2005 and 2006 and for the three months ended March 31, 2007 are as follows:

	2002	2003	Year ended December 31,			Three months ended
			2004	2005	2006	March 31, 2007
Ratios of earnings to fixed charges(1)	2.29x	1.66x	1.37x	(1.52)x	(0.30)x	2.77x

(1) For purposes of calculating the ratio of earnings to fixed charges, earnings consist of income from continuing operations before provision for income taxes plus equity income plus deferred fixed charges less capitalized interest, and fixed charges consist of interest expensed and capitalized, amortization of debt discount and deferred expenses related to indebtedness, write-off of deferred expenses related to indebtedness and the portion of rental expenses deemed to be representative of the interest factor attributable to leases for rental property. Fixed charges exceeded earnings by \$19.0 million and \$12.0 million in 2005 and 2006, respectively.

Table of Contents

Risk factors

The following information describes certain significant risks and uncertainties inherent in our business. Some of these risks are described below and in the documents incorporated by reference in this prospectus, and you should take these risks into account in evaluating us or any investment decision involving us or in deciding whether to purchase notes. This section does not describe all risks applicable to us, our industry or our business. You should carefully consider such risks and uncertainties, together with the other information contained herein and in the documents incorporated herein by reference, including our Annual Report on Form 10-K for the fiscal year ended December 31, 2006 and our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2007. If any of such risks and uncertainties actually occurs, our business, financial condition or operating results could be harmed substantially and could differ materially from the plans, projections and other forward-looking statements included elsewhere herein and in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2006 and our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2007.

Risks relating to our business

Our pension plans are currently underfunded, and we expect to be subject to significant increases in pension contributions to our defined benefit pension plans, thereby restricting our cash flow.

We sponsor various pension plans in the United States and Europe that are underfunded and require significant cash payments. We contributed \$2.4 million and \$9.2 million to our U.S. pension plans and \$2.1 million and \$2.2 million to our European pension plans in 2005 and 2006, respectively. We currently expect to be required to contribute approximately \$3.2 million to our U.S. pension plans and approximately \$2.3 million to our European pension plans in 2007. If our cash flow from operations is insufficient to fund our worldwide pension liability, we may be forced to reduce or delay capital expenditures, seek additional capital or restructure or refinance our indebtedness.

The funding status of our pension plans is determined using many assumptions, such as inflation, investment rates, mortality, turnover and discount rates, any of which could prove to be different than projected. If the performance of the assets in our pension plans does not meet our expectations, or if other actuarial assumptions are modified, we may be required to contribute more to our pension plans than we currently expect. For example, an approximate 25-basis point decline in the current liability interest rate, which is used under the Employee Retirement Income Security Act of 1974, or ERISA, for funding purposes, would increase our minimum required contribution to our U.S. pension plans by approximately \$0.9 million over the next three years.

Our pension plans in the aggregate are underfunded by approximately \$35 million as of December 31, 2006 (based on the actuarial assumptions used for FAS 87 purposes and comparing our projected benefit obligation to the fair value of plan assets) and require a certain level of mandatory contributions as prescribed by law. Our U.S. pension plans, which are underfunded by approximately \$18 million as of December 31, 2006, are subject to ERISA. In the event our U.S. pension plans are terminated for any reason while the plans are less than fully funded, we will incur a liability to the Pension Benefit Guaranty Corporation that may be equal

Table of Contents

to the entire amount of the underfunding at the time of the termination. In addition, changes in required pension funding rules that were affected by the enactment of the Pension Protection Act of 2006 will significantly increase our funding requirements beginning in 2008, which will have an adverse effect on our cash flow and could require us to reduce or delay our capital expenditures, seek additional capital or restructure or refinance our indebtedness. See Note 14 to our consolidated financial statements contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2006.

Our financial results could be adversely affected by an interruption of supply or an increase in coal prices.

We use bituminous coal as the main raw material in our granular activated carbon production process. We estimate that coal will represent approximately 37% of our carbon product costs in 2007. We have various annual and multi-year contracts in place for the supply of coal that expire at various intervals from 2007 to 2011. Interruptions in coal supply caused by mine accidents, labor disputes, transportation delays, or other events for other than a temporary period could have an adverse effect on our being able to meet our customer demand. In addition, increases in the prices we pay for coal under our supply contracts could adversely affect our financial results by significantly increasing production costs. During 2006, our aggregate costs for coal increased by \$2.1 million, or 15.6%, compared to 2005. Based upon the estimated usage of coal in 2007, a hypothetical 10% increase in the price of coal would result in \$1.1 million of additional pre-tax expenses to us. Historically, we have generally not been able to pass through raw materials price increases to our customers, and we may in the future continue to be generally unable to do so.

Our financial results could be adversely affected by shortages in energy supply or increases in energy costs.

The prices for and availability of energy resources could be volatile as they are affected by political and economic conditions that are outside our control. We utilize natural gas as a key component in our activated carbon manufacturing process and have annual and multi-year contracts for the supply of natural gas at each of our major facilities. If shortages of or restrictions on the delivery of natural gas occur, production at our activated carbon facilities would be reduced, which could result in missed deliveries or lost sales. We also have exposure to fluctuations in energy costs as they relate to the transportation and distribution of our products. For example, natural gas prices have increased significantly in recent years. We may not be able to pass through natural gas and other fuel price increases to our customers.

Increases in U.S. and European imports of Chinese manufactured activated carbon could have an adverse effect on our financial results.

We historically have faced pressure and competition in our U.S. and European markets from brokers of low cost imported activated carbon products, primarily from China. We believe that we offer the market technically superior products and related customer support. However, Chinese products have become accepted as viable alternatives to our products because they frequently have been sold at less than fair value in the market. As a result, we have had to deal with significant price compression, which has contributed to a reduction in both our sales and profitability in recent years.

Table of Contents

To combat the low-cost Chinese products, in March 2006, the Company participated in filing a petition with the U.S. Department of Commerce (the DOC) requesting the imposition of antidumping duties on all steam activated carboe of the Warrant may be accelerated at the Issuer's option if the shares of Common Stock meets certain price thresholds and the Common Stock underlying the Warrant is registered for resale pursuant to an effective registration statement or are freely transferable without volume restrictions pursuant to Rule 144 under the Securities Act of 1933, as amended.

Item 4. Purpose of the Transaction.

Item 4 of the Schedule 13D is hereby amended and restated in its entirety as follows:

The purpose of the transactions was to acquire equity investment interests in the Issuer and to support the Issuer in its development of Beclomethasone Dipropionate.

Page 9 of 25

The February 2009 Purchase Agreement provides that, to the extent Sigma-Tau Pharmaceuticals continues to beneficially own ten percent of the Common Stock issued by the Issuer, Sigma-Tau Pharmaceuticals shall have the right to nominate one member of the Issuer's Board of Directors, who shall be reasonably satisfactory to the Issuer. If it is determined that such nominee cannot be nominated for the 2009 annual election of the Issuer's Board of Directors, the Issuer shall appoint such nominee to fill any current vacancy that exists on the Issuer's Board of Directors.

The Issuer undertook in the February 2009 Purchase Agreement to use the proceeds from the sale of the stock pursuant to the Letter of Intent and the February 2009 Purchase Agreement only for the furtherance of a phase 3 clinical study relating to Beclomethasone Dipropionate and product development activities necessary to obtain and maintain the authorizations from regulatory authorities necessary for the marketing, use, distribution and sale of such product. The September 2009 Purchase Agreement provides that the net proceeds from the offer and sale of the securities thereunder will be used to advance the preclinical, clinical and regulatory development of the Issuer's drug and vaccine candidates. A portion of the net proceeds shall also be used for general corporate purposes, including the maintenance of in-licensed patent rights and proprietary intellectual property patent applications and patents. No portion of the net proceeds will be used to redeem outstanding securities of the Issuer.

Other than as set forth above, none of the Reporting Parties has any present plans or proposals which relate to or would result in any transaction, change or event specified in clauses (a) through (j) of Item 4 of Schedule 13D.

Item 5. Interest in Securities of Issuer.

Item 5 of the Schedule 13D is hereby amended and restated in its entirety as follows:

(a) Paolo Cavazza is the beneficial owner of 49,142,390 shares of Common Stock representing 26.3% (based on 167,424,666 shares of Common Stock outstanding as of August 10, 2009, as reported in the Issuer's Quarterly Report on Form 10-Q, filed pursuant to the Securities Exchange Act of 1934, as amended, with the Securities and Exchange Commission on August 14, 2009, plus 17,352,569 shares of Common Stock issued by the Issuer pursuant to its private placement in September 2009, as reported in the Issuer's Current Report on Form 8-K, filed pursuant to the Securities Exchange Act of 1934, as amended, with the Securities and Exchange Commission on September 29, 2009, plus 1,976,284 shares of Common Stock issuable upon exercise of the Warrant (as defined below)).

Claudio Cavazza is the beneficial owner of 47,595,520 shares of Common Stock representing 25.5% (based on 167,424,666 shares of Common Stock outstanding as of August 10, 2009, as reported in the Issuer's Quarterly Report on Form 10-Q, filed pursuant to the Securities Exchange Act of 1934, as amended, with the Securities and Exchange Commission on August 14, 2009, plus 17,352,569 shares of Common Stock issued by the Issuer pursuant to its private placement in September 2009, as reported in the Issuer's Current Report on Form 8-K, filed pursuant to the Securities Exchange Act of 1934, as amended, with the Securities and Exchange Commission on September 29, 2009, plus 1,976,284 shares of Common Stock issuable upon exercise of the Warrant (as defined below)).

Sigma-Tau Finanziaria is the beneficial owner of 47,595,520 shares of Common Stock representing 25.5% (based on 167,424,666 shares of Common Stock outstanding as of August 10, 2009, as reported in the Issuer's Quarterly Report on Form 10-Q, filed pursuant to the Securities Exchange Act of 1934, as amended, with the Securities and Exchange Commission on August 14, 2009, plus 17,352,569 shares of Common Stock issued by the Issuer pursuant to its private placement in September 2009, as reported in the Issuer's Current Report on Form 8-K, filed pursuant to the Securities Exchange Act of 1934,

as amended, with the Securities and Exchange Commission on September 29, 2009, plus 1,976,284 shares of Common Stock issuable upon exercise of the Warrant (as defined below)).

Sigma-Tau International is the beneficial owner of 47,595,520 shares of Common Stock representing 25.5% (based on 167,424,666 shares of Common Stock outstanding as of August 10, 2009, as reported in the Issuer's Quarterly Report on Form 10-Q, filed pursuant to the Securities Exchange Act of 1934, as amended, with the Securities and Exchange Commission on August 14, 2009, plus 17,352,569 shares of Common Stock issued by the Issuer pursuant to its private placement in September 2009, as reported in the Issuer's Current Report on Form 8-K, filed pursuant to the Securities Exchange Act of 1934, as amended, with the Securities and Exchange Commission on September 29, 2009, plus 1,976,284 shares of Common Stock issuable upon exercise of the Warrant (as defined below)).

Sigma-Tau America is the beneficial owner of 47,595,520 shares of Common Stock representing 25.5% (based on 167,424,666 shares of Common Stock outstanding as of August 10, 2009, as reported in the Issuer's Quarterly Report on Form 10-Q, filed pursuant to the Securities Exchange Act of 1934, as amended, with the Securities and Exchange Commission on August 14, 2009, plus 17,352,569 shares of Common Stock issued by the Issuer pursuant to its private placement in September 2009, as reported in the Issuer's Current Report on Form 8-K, filed pursuant to the Securities Exchange Act of 1934, as amended, with the Securities and Exchange Commission on September 29, 2009, plus 1,976,284 shares of Common Stock issuable upon exercise of the Warrant (as defined below)).

Sigma-Tau Pharmaceuticals is the beneficial owner of 47,595,520 shares of Common Stock representing 25.5% (based on 167,424,666 shares of Common Stock outstanding as of August 10, 2009, as reported in the Issuer's Quarterly Report on Form 10-Q, filed pursuant to the Securities Exchange Act of 1934, as amended, with the Securities and Exchange Commission on August 14, 2009, plus 17,352,569 shares of Common Stock issued by the Issuer pursuant to its private placement in September 2009, as reported in the Issuer's Current Report on Form 8-K, filed pursuant to the Securities Exchange Act of 1934, as amended, with the Securities and Exchange Commission on September 29, 2009, plus 1,976,284 shares of Common Stock issuable upon exercise of the Warrant (as defined below)).

(b) The number of shares of Common Stock as to which Paolo Cavazza has the sole power to vote or direct the vote is 1,190,770. The number of shares of Common Stock as to which Paolo Cavazza shares the power to vote or direct the vote is 47,951,620. The number of shares of Common Stock as to which Paolo Cavazza has the sole power to dispose or direct the disposition is 1,190,770. The number of shares of Common Stock as to which Paolo Cavazza shares the power to dispose or direct the disposition is 47,951,620.

The number of shares of Common Stock as to which Claudio Cavazza has the sole power to vote or direct the vote is zero. The number of shares of Common Stock as to which Claudio Cavazza shares the power to vote or direct the vote is 47,595,520. The number of shares of Common Stock as to which Claudio Cavazza has the sole power to dispose or direct the disposition is zero. The number of shares of Common Stock as to which Claudio Cavazza shares the power to dispose or direct the disposition is 47,595,520.

The number of shares of Common Stock as to which Sigma-Tau Finanziaria has the sole power to vote or direct the vote is zero. The number of shares of Common Stock as to which Sigma-Tau Finanziaria shares the power to vote or direct the vote is 47,595,520. The number of shares of Common Stock as to which Sigma-Tau Finanziaria has the sole power to dispose or direct the disposition is zero. The number of shares of Common Stock as to which Sigma-Tau Finanziaria shares the power to dispose or direct the disposition is 47,595,520.

The number of shares of Common Stock as to which Sigma-Tau International has the sole power to vote or direct the vote is zero. The number of shares of Common Stock as to which Sigma-Tau International shares the power to vote or direct the vote is 47,595,520. The number of shares of Common Stock as to which Sigma-Tau International has the sole power to dispose or direct the disposition is zero. The number of shares of Common Stock as to which Sigma-Tau International shares the power to dispose or direct the disposition is 47,595,520.

The number of shares of Common Stock as to which Sigma-Tau America has the sole power to vote or direct the vote is zero. The number of shares of Common Stock as to which Sigma-Tau America shares the power to vote or direct the vote is 47,595,520. The number of shares of Common Stock as to which Sigma-Tau America has the sole power to dispose or direct the disposition is zero. The number of shares of Common Stock as to which Sigma Tau America shares the power to dispose or direct the disposition is 47,595,520.

The number of shares of Common Stock as to which Sigma-Tau Pharmaceuticals has the sole power to vote or direct the vote is zero. The number of shares of Common Stock as to which Sigma-Tau Pharmaceuticals shares the power to vote or direct the vote is 47,595,520. The number of shares of Common Stock as to which Sigma-Tau Pharmaceuticals has the sole power to dispose or direct the disposition is zero. The number of shares of Common Stock as to which Sigma-Tau Pharmaceuticals shares the power to dispose or direct the disposition is 47,595,520.

(c) On September 24, 2009, pursuant to a Securities Purchase Agreement dated as of September 23, 2009, Sigma-Tau Pharmaceuticals agreed to purchase and, on September 28, 2009, Sigma-Tau Pharmaceuticals purchased 3,952,569 shares of Common Stock for a cash purchase price of \$0.253 per share in a private placement. In consideration of the purchase of such shares, the Issuer issued the Warrant to Sigma-Tau Pharmaceuticals to purchase 1,976,284 shares of Common Stock, exercisable at a price of \$0.278 per share, in whole or in part, at any time and from time to time from September 28, 2009 through September 27, 2014. The expiration date of the Warrant may be accelerated at the Issuer's option if the Common Stock meets certain price thresholds and the Common Stock underlying the Warrant is registered for resale pursuant to an effective registration statement or are freely transferable without volume restrictions pursuant to Rule 144 under the Securities Act of 1933, as amended.

(d) N/A.

(e) N/A.

Item 6. Contracts, Arrangements, Understanding or
 Relationships with Respect to Securities of the Issuer.

Item 6 of the Schedule 13D is hereby amended and restated in its entirety as follows:

Pursuant to the Letter of Intent, the Issuer and Sigma-Tau Pharmaceuticals entered into a Registration Rights Agreement pursuant to which the Issuer has granted Sigma-Tau Pharmaceuticals certain demand and piggyback registration rights covering the shares of Common Stock sold pursuant to the Letter of Intent. Pursuant to the February 2009 Purchase Agreement, the Issuer has granted to Sigma-Tau Pharmaceuticals certain demand and piggyback registration rights covering the shares of Common Stock sold pursuant to the February 2009 Purchase Agreement.

Pursuant to the September 2009 Purchase Agreement, the Issuer and Sigma-Tau Pharmaceuticals entered into a registration rights agreement pursuant to which the Issuer has agreed to file a reg-

istration statement covering the shares of Common Stock sold pursuant to the September 2009 Purchase Agreement and the shares of Common Stock issuable upon exercise of the Warrant.

The Issuer has agreed in the September 2009 Purchase Agreement that, until 60 days after the closing of the transaction under the September 2009 Purchase Agreement, neither it nor any of its subsidiaries will issue any shares of Common Stock or any security that entitles the holder thereof to receive Common Stock except pursuant to certain exempted issuances.

Except as otherwise set forth in Items 3 and 4 and this Item 6 of this Schedule 13D, to the best knowledge of the Reporting Parties there are no other contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the Issuer, including but not limited to, transfer or voting of any of the securities of the Issuer, finders fees, joint ventures, loan or oppositions arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies, or a pledge or contingency the occurrence of which would give another person voting power over the securities of the Issuer.

Item 7. Material to Be Filed as Exhibits.

Item 7 of the Schedule 13D is hereby amended and restated in its entirety as follows:

- A. Joint Filing Agreement dated October 2, 2009 by and among Paolo Cavazza, Claudio Cavazza, Sigma-Tau Finanziaria S.p.A., Sigma-Tau Pharmaceuticals, Inc., Sigma-Tau America S.A. and Sigma-Tau International S.A.
- B. Power of Attorney, dated January 9, 2007, granted by Messrs. Dominique Audia and Luca Checchinato, directors of Sigma-Tau International S.A., in favor of Messrs. Gregg Lapointe and Don DeLillo¹
- C. Power of Attorney, dated January 9, 2007, granted by Messrs. Dominique Audia and Luca Checchinato, directors of Sigma-Tau America S.A., in favor of Messrs. Gregg Lapointe and Don DeLillo²
- D. Power of Attorney, dated January 10, 2007, granted by Mr. Paolo Cavazza in favor of Messrs. Antonio Nicolai and Maurizio Terenzi³

1 Incorporated by reference to the Reporting Person's Schedule 13G filed with the SEC on January 12, 2007.

2 Incorporated by reference to the Reporting Person's Schedule 13G filed with the SEC on January 12, 2007.

3 Incorporated by reference to the Reporting Person's Schedule 13G filed with the SEC on January 12, 2007.

E. Power of Attorney, dated January 10, 2007, granted by Mr. Claudio Cavazza, President of Sigma-Tau Finanziaria S.p.A., in favour of Messrs. Antonio Nicolai and Maurizio Terenzi⁴

F. Power of Attorney, dated January 10, 2007, granted by Mr. Claudio Cavazza in favor of Messrs. Antonio Nicolai and Maurizio Terenzi⁵

G. Form of Letter of Intent dated November 26, 2008⁶

H. Form of Common Stock Purchase Agreement dated as of February 11, 2009⁷

I. Form of Securities Purchase Agreement⁸

J. Form of Warrant⁹

4 Incorporated by reference to the Reporting Person's Schedule 13G filed with the SEC on January 12, 2007.

5 Incorporated by reference to the Reporting Person's Schedule 13G filed with the SEC on January 12, 2007.

6 Incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K filed with the SEC on December 1, 2008.

7 Incorporated by reference to Exhibit 10.44 to the Issuer's Registration Statement on Form S-1 (333-157322) filed with the SEC on February 13, 2009.

8 Incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K filed with the SEC on September 29, 2009.

9 Incorporated by reference to Exhibit 10.2 to the Issuer's Current Report on Form 8-K filed with the SEC on September 29, 2009.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement with respect to Paolo Cavazza is true, complete and correct.

Date: October 2, 2009

PAOLO CAVAZZA

By: /s/ Maurizio
Terenzi
Name: Maurizio
Terenzi
Title: Proxy-holder
authorized

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement with respect to Claudio Cavazza is true, complete and correct.

Date: October 2, 2009

CLAUDIO
CAVAZZA

By: /s/ Maurizio
Terenzi
Name: Maurizio
Terenzi
Title: Proxy-holder
authorized

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement with respect to Sigma-Tau Finanziaria S.p.A. is true, complete and correct.

Date: October 2, 2009

SIGMA-TAU
FINANZIARIA
S.P.A.

By: /s/ Maurizio
Terenzi

Name: Maurizio
Terenzi
Title: Proxy-holder
authorized

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement with respect to Sigma-Tau International S.A. is true, complete and correct.

Date: October 2, 2009

SIGMA-TAU
INTERNATIONAL
S.A.

By: /s/ Gregg
Lapointe
Name: Gregg Lapointe
Title: Attorney-in-fact

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement with respect to Sigma-Tau America S.A. is true, complete and correct.

Date: October 2, 2009

SIGMA-TAU
AMERICA S.A.

By: /s/ Gregg
Lapointe
Name: Gregg Lapointe
Title: Attorney-in-fact

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement with respect to Sigma-Tau Pharmaceuticals, Inc. is true, complete and correct.

Date: October 2, 2009

SIGMA-TAU
PHARMACEUTICALS,
INC.

By: /s/ Gregg
Lapointe
Name: Gregg Lapointe
Title: Chief Executive
Officer

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative (other than an executive officer or general partner of the filing persons), evidence of the representative's authority to sign on behalf of such persons shall be filed with the statement; provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See 18 U.S.C. 1001)

Page 17 of 25

SCHEDULE A

Sigma Tau Finanziaria S.p.A.

The (a) name, (b) business address, (c) present principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted and (d) citizenship of each executive officer and director (other than Messrs. E. Cavazza, Jones, Platé, Artali and Cerrina Feroni) of Sigma-Tau Finanziaria are set forth below:

1. (a) Claudio Cavazza, (b) Via Pontina Km. 30,400, Pomezia (Rome), Italy, 00040, (c) President, and (d) Italy.
2. (a) Ugo Di Francesco, (b) Via Sudafrica, 20, Rome, Italy 00144, (c) Vice President and Chief Executive Officer, and (d) Italy.
3. (a) Marco Codella, (b) Via Sudafrica, 20, Rome, Italy 00144, (c) Managing Director, and (d) Italy.
4. (a) Mauro Bove, (b) Via Sudafrica, 20, Rome, Italy 00144, (c) Managing Director, and (d) Italy.
5. (a) Stefano Marino, (b) Via Pontina Km. 30,400, Pomezia (Rome), Italy, 00040, (c) General Counsel of Sigma-Tau Industrie Farmaceutiche Riunite SpA; Corporate Legal and Intellectual Property Director at Sigma-Tau Finanziaria SpA, and (d) Italy.

The (a) name, (b) business address, (c) present principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted and (d) citizenship of each director (other than Messrs. C. Cavazza, Di Francesco, Codella, Bove and Marino) of Sigma-Tau Finanziaria are set forth below:

1. (a) Enrico Cavazza, (b) Via Pontina Km. 30,400, Pomezia (Rome), Italy, (c) executive, Sigma-Tau Industrie Farmaceutica Riunite SpA, and (d) Italy.
2. (a) Trevor Jones, (b) Woodhyrst House, 18 Friths Drive, REIGATE, Surrey, Great Britain, (c) professor, and (d) Great Britain.
3. (a) Emilio Platé, (b) Via Finocchiaro Aprile n.5, Varese, Italy, (c) business consultant, and (d) Italy.
4. (a) Mario Artali, (b) Piazza F. Meda 4, Milano, Italy 20121, (c) Deputy Chairman, Banca Popolare di Milano, and (d) Italy.
5. (a) Marco Cerrina Feroni, (b) Piazza Paolo Ferrari 10, Milano, Italy 20121, (c) executive, Intesa Sanpaolo SpA, and (d) Italy.

The (a) name, (b) business address, (c) present principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted and (d) citizenship of each controlling person of Sigma-Tau Finanziaria are set forth below:

1. (a) Claudio Cavazza, (b) Pontina Km. 30,400, Pomezia (Rome), Italy 00040, (c) President, Sigma Tau, and (d) Italy.
2. (a) Paolo Cavazza, (b) Via Tesserete, 10, Lugano, Switzerland, (c) entrepreneur, Sigma Tau, Aptafin SpA and Esseti S.A., and (d) Italy.

Claudio Cavazza directly and indirectly owns 57% of Sigma Tau and Paolo Cavazza directly and indirectly owns 38% of Sigma Tau.

Sigma-Tau International S.A.

The (a) name, (b) business address, (c) present principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted and (d) citizenship of each executive officer and director of Sigma-Tau International are set forth below:

1. (a) Ugo Di Francesco, (b) Via Sudafrica, 20, Rome, Italy 00144, (c) Vice President and Chief Executive Officer of Sigma Tau Finanziaria S.P.A, located at Via Sudafrica 20 – 00144 Rome (Italy), and (d) Italy.
2. (a) Dominique Audia, (b) 19/21 Boulevard du Prince Henri - L-1724 Luxembourg, (c) Manager of Société Européenne de Banque S.A located at 19/21 Boulevard du Prince Henri - L-1724 Luxembourg, and (d) French.
3. (a) Mauro Bove, (b) Via Sudafrica, 20, Rome, Italy 00144, (c) Managing Director of Sigma Tau Finanziaria S.P.A, located at Via Sudafrica 20, and (d) Italy.
4. (a) Antonio Nicolai, (b) Via Pontina Km. 30,400, Pomezia (Rome), Italy, 00040, (c) President of Sigma Tau Pharmaceuticals located at 9841 Washingtonian Blvd, Suite 500- Gaithersburg MD 20878, and (d) Italy.
5. (a) Luca Checchinato, (b) 19/21 Boulevard du Prince Henri L-1724 Luxembourg, (c) Manager of Société Européenne de Banque S.A, located at 19/21 Boulevard du Prince Henri - L-1724 Luxembourg, and (d) Italy.
6. (a) Francesco Moglia, (b) 19/21 Boulevard du Prince Henri -L-1724 Luxembourg, (c) Manager of Société Européenne de Banque S.A. located at 19/21 Boulevard du Prince Henri - L-1724 Luxembourg, and (d) Italy.
7. (a) Gustave Stoffel, (b) 31, Boulevard Grande – Duchesse Charlotte- L – 1331 Luxembourg, (c) CEO of Profida Luxembourg located at 31, Boulevard Grande – Duchesse Charlotte- L – 1331 Luxembourg, and (d) Luxembourg.

Sigma-Tau America S.A.

The (a) name, (b) business address, (c) present principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted and (d) citizenship of each director of Sigma-Tau America are set forth below:

1. (a) Luca Checchinato, (b) 19/21 Boulevard du Prince Henri L-1724 Luxembourg, (c) Manager of Société Européenne de Banque S.A, located at 19/21 Boulevard du Prince Henri - L-1724 Luxembourg, and (d) Italy.
2. (a) Antonio Nicolai, (b) Via Pontina Km. 30,400, Pomezia (Rome), Italy, 00040, (c) President of Sigma Tau Pharmaceuticals located at 9841 Washingtonian Blvd, Suite 500- Gaithersburg MD 20878, and (d) Italy.

3. (a) Dominique Audia, (b) 19/21 Boulevard du Prince Henri - L-1724 Luxembourg, (c) Manager of Société Européenne de Banque S.A, located at 19/21 Boulevard du Prince Henri - L-1724 Luxembourg, and (d) French.
4. (a) Cristobalina Moron, (b) 19/21 Boulevard du Prince Henri - L-1724 Luxembourg, (c) Employee of Société Européenne de Banque S.A, located at 19/21 Boulevard du Prince Henri - L-1724 Luxembourg, and (d) French.
5. (a) Mauro Bove, (b) Via Sudafrica, 20, Rome, Italy 00144, (c) Managing Director of Sigma Tau Finanziaria S.P.A, located at Via Sudafrica 20, and (d) Italy.
6. (a) Christophe Velle, (b) 19/21 Boulevard du Prince Henri - L-1724 Luxembourg, (c) Manager of Société Européenne de Banque S.A located at 19/21 Boulevard du Prince Henri - L-1724 Luxembourg, and (d) French.

Sigma-Tau Pharmaceuticals. Inc.

The (a) name, (b) business address, (c) present principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted and (d) citizenship of each director of Sigma-Tau Pharmaceuticals are set forth below:

1. (a) Antonio Nicolai, (b) Via Pontina Km. 30,400, Pomezia (Rome), Italy, 00040, (c) President, and (d) Italy.
2. (a) Gregg Lapointe, (b) 9841 Washingtonian Blvd, Suite 500- Gaithersburg MD 20878, (c) Chief Executive Officer, and (d) United States.
3. (a) Ugo Di Francesco, (b) Via Sudafrica, 20, Rome, Italy 00144, (c) Vice President and Chief Executive Officer of Sigma-Tau Finanziaria S.p.A. located at Via Sudafrica 20, Rome, Italy 00144, and (d) Italy.
4. (a) Mauro Bove, (b) Via Sudafrica, 20, Rome, Italy 00144, (c) Head Corporate & Business Development of Sigma-Tau Finanziaria S.p.A. located at Via Sudafrica 20, Rome, Italy 00144, and (d) Italy.
5. (a) Stefano Marino, (b) Via Pontina Km. 30,400, Pomezia (Rome), Italy, 00040, (c) General Counsel of Sigma-Tau Industrie Farmaceutiche Riunite SpA located at Via Pontina Km. 30,400, Pomezia (Rome), Italy; Corporate Legal and Intellectual Property Director at Sigma-Tau Finanziaria SpA located at Via Sudafrica 20, Rome, Italy 00144, and (d) Italy.
6. (a) Paolo Carminati, (b) Via Pontina Km. 30,400, Pomezia (Rome), Italy, 00040, (c) Corporate Research & Development Director of Sigma-Tau Industrie Farmaceutica Riunite SpA, located at Via Pontina Km. 30,400, Pomezia (Rome), Italy, and (d) Italy.
7. (a) Marco Codella, (b) Via Sudafrica, 20, Rome, Italy 00144, (c) Managing Director of Sigma-Tau Finanziaria S.p.A., and (d) Italy.

EXHIBIT INDEX

	Page
A. Joint Filing Agreement dated October 2, 2009 by and among Paolo Cavazza, Claudio Cavazza, Sigma-Tau Finanziaria S.p.A., Sigma-Tau Pharmaceuticals, Inc., Sigma-Tau America S.A. and Sigma-Tau International S.A.	24
B. Power of Attorney, dated January 9, 2007, granted by Messrs. Dominique Audia and Luca Checchinato, directors of Sigma-Tau International S.A., in favor of Messrs. Gregg Lapointe and Don DeLillo ¹	
C. Power of Attorney, dated January 9, 2007, granted by Messrs. Dominique Audia and Luca Checchinato, directors of Sigma-Tau America S.A., in favor of Messrs. Gregg Lapointe and Don DeLillo ²	
D. Power of Attorney, dated January 10, 2007, granted by Mr. Paolo Cavazza in favor of Messrs. Antonio Nicolai and Maurizio Terenzi ³	
E. Power of Attorney, dated January 10, 2007, granted by Mr. Claudio Cavazza, President of Sigma-Tau Finanziaria S.p.A., in favour of Messrs. Antonio Nicolai and Maurizio Terenzi ⁴	
F. Power of Attorney, dated January 10, 2007, granted by Mr. Claudio Cavazza in favor of Messrs. Antonio Nicolai and Maurizio Terenzi ⁵	

-
- 1 Incorporated by reference to the Reporting Person's Schedule 13G filed with the SEC on January 12, 2007.
 - 2 Incorporated by reference to the Reporting Person's Schedule 13G filed with the SEC on January 12, 2007.
 - 3 Incorporated by reference to the Reporting Person's Schedule 13G filed with the SEC on January 12, 2007.
 - 4 Incorporated by reference to the Reporting Person's Schedule 13G filed with the SEC on January 12, 2007.
 - 5 Incorporated by reference to the Reporting Person's Schedule 13G filed with the SEC on January 12, 2007.

G. Form of Letter of Intent dated November 26, 2008⁶

H. Form of Common Stock Purchase Agreement dated as of February 11, 2009⁷

I. Form of Securities Purchase Agreement⁸

J. Form of Warrant⁹

6 Incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K filed with the SEC on December 1, 2008.

7 Incorporated by reference to Exhibit 10.44 to the Issuer's Registration Statement on Form S-1 (333-157322) filed with the SEC on February 13, 2009.

8 Incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K filed with the SEC on September 29, 2009.

9 Incorporated by reference to Exhibit 10.2 to the Issuer's Current Report on Form 8-K filed with the SEC on September 29, 2009.

Page 23 of 25

EXHIBIT A

JOINT FILING AGREEMENT

The undersigned hereby agree that the amended and restated statement on Schedule 13D with respect to the Common Stock of Soligenix, Inc. dated as of October 2, 2009 is, and any amendments thereto signed by each of the undersigned shall be, filed on behalf of each of us pursuant to and in accordance with the provisions of Rule 13d-1(f) under the Securities Exchange Act of 1934.

Dated: October 2, 2009

PAOLO CAVAZZA

By: /s/ Maurizio Terenzi
Name: Maurizio Terenzi
Title: Proxy-holder authorized

Dated: October 2, 2009

CLAUDIO CAVAZZA

By: /s/ Maurizio Terenzi
Name: Maurizio Terenzi
Title: Proxy-holder authorized

Dated: October 2, 2009

SIGMA-TAU FINANZIARIA S.P.A.

By: /s/ Maurizio Terenzi
Name: Maurizio Terenzi
Title: Proxy-holder authorized

Dated: October 2, 2009

SIGMA-TAU INTERNATIONAL S.A.

By: /s/ Gregg Lapointe
Name: Gregg Lapointe
Title: Attorney-in-fact

Dated: October 2, 2009

SIGMA-TAU AMERICA S.A.

By: /s/ Gregg Lapointe
Name: Gregg Lapointe
Title: Attorney-in-fact

Dated: October 2, 2009

SIGMA-TAU PHARMACEUTICALS, INC.

By: /s/ Gregg Lapointe
Name: Gregg Lapointe
Title: Attorney-in-fact

Page 25 of 25