

OPEXA THERAPEUTICS, INC.

FORM POS AM

(Post-Effective Amendment to Registration Statement)

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 6

TO
FORM SB-2
ON
FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Opexa Therapeutics, Inc.

(Name of small business issuer on its charter)

Texas

(State or Other Jurisdiction of Incorporation or Organization)

2834

(Primary Standard Industrial Classification Code Number)

76-0333165

(I.R.S. Employer Identification Number)

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(Address and telephone number
of principal executive offices and principal place of business)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If 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, 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: ☐ _____

If delivery of the prospectus is expected to be made pursuant to Rule 434, check the following box: ☐ _____

The information in this prospectus is not complete and may be changed. The selling stockholder 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.

SUBJECT TO COMPLETION DATED December 19, 2007



OPEXA THERAPEUTICS

Opexa Therapeutics, Inc.

2,431,453 Shares of Common Stock

This prospectus relates to the resale from time to time by the selling stockholders of up to 2,431,453 shares of our common stock, including 1,274,819 shares of common stock previously issued and 1,156,634 shares of common stock issuable upon the exercise of common stock purchase warrants. A series of warrants underlying 1,041,140 shares of common stock expired on February 17, 2006. A series of warrants underlying 603,867 shares of common stock expired on October 17, 2006. The selling stockholders may sell the shares of common stock from time to time in the principal market on which the stock is traded at the prevailing market price or in negotiated transactions.

Shares of our common stock are traded on Nasdaq Capital Market under the symbol "OPXA". December 18, 2007, the last reported sales price for our common stock was \$2.40 per share.

We will not receive any proceeds from the sale of the shares of our common stock covered by this prospectus. We will, however, receive the proceeds of any cash exercise of the common stock purchase warrants.

Investing in our common stock involves a high degree of risk. You should read carefully this entire prospectus, including the section captioned "Risk Factors" beginning on page 2, before making a decision to purchase our stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities 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 _____, 2007.

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You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with information that is different. This prospectus may only be used where it is legal to sell these shares of our common stock. The information in this prospectus may only be accurate as of the date of this prospectus.

This prospectus provides you with a general description of the shares of our common stock that the selling stockholders may offer. Each time a selling stockholder sells shares of our common stock, the selling stockholder is required to provide you with a prospectus containing specific information about the selling stockholder and the terms of the shares of our common stock being offered to you.

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission for a continuous offering. Under this prospectus, the selling stockholders may, from time to time, sell or otherwise dispose of the shares of our common stock described in this prospectus, or interests therein, in one or more offerings. This prospectus may be supplemented from time to time to add, update or change information in this prospectus. Any statement contained in this prospectus will be deemed to be modified or superseded for the purposes of this prospectus to the extent that a statement contained in a prospectus supplement modifies such statement. Any statement so modified will be deemed to constitute a part of this prospectus only as so modified, and any statement so modified will be deemed to constitute a part of this prospectus.

The registration statement containing this prospectus, including the exhibits to the registration statement, provides additional information about us, the selling stockholders and the shares of our common stock covered by this prospectus. The registration statement, including the exhibits, can be read on the SEC website or at the SEC offices mentioned under the heading “Where You Can Find More Information.”

PROSPECTUS SUMMARY

The following summary highlights selected information from this prospectus and does not contain all of the information that you should consider before investing in our common stock. This prospectus contains information regarding our businesses and detailed financial information. You should carefully read this entire prospectus, together with the additional information about us described in the sections entitled “Information Incorporated by Reference” and “Where You Can Find More Information”, before making an investment decision.

In this prospectus, “Opexa Therapeutics, Inc.,” “we,” “us” or “our” refer to Opexa Therapeutics, Inc., a Texas corporation, and its subsidiaries, except where otherwise indicated or required by context.

Our Business

We are a biopharmaceutical company developing autologous (using one’s own cells) cellular therapies to treat several major illnesses, including multiple sclerosis (MS), rheumatoid arthritis (RA), and diabetes. These therapies are based on our proprietary T-cell and adult stem cell technologies.

Our lead product, Tovaxin®, is a T-cell based therapeutic vaccine for MS licensed from the Baylor College of Medicine, which offers a unique and personalized approach to treating the disease by inducing an immune response against the autoimmune myelin peptide-reactive T-cells (MRTCs), which are believed to be responsible for the initiation of the disease process.

We are currently conducting a fully enrolled 150 patient Phase IIb clinical trial for Tovaxin. Patients treated in a 10-subject, open-label Phase I/II dose escalation clinical trial with Tovaxin have experienced minimal side effects and the “per protocol” analysis of patients treated with Tovaxin achieved a 90% reduction ($p=0.0039$) in annualized relapse rate (ARR). Annualized Relapse Rate is a defined neurological episode and is generally the primary clinical efficacy measure for MS therapies. The group treated with the mid dose ($30-45 \times 10^6$ attenuated T-cells) achieved a 100% reduction in ARR. The Phase IIb trial is being conducted with the mid dose.

In a one-year, 8-subject extension clinical trial of relapsing remitting (RRMS) and secondary progressive (SPMS) subjects, the “per-protocol” analysis of Tovaxin therapy achieved a 92% ($p=0.0078$) reduction in annualized relapse rate (ARR) in subjects who received two treatment doses of $30-45 \times 10^6$ attenuated T-cells eight weeks apart and were monitored for an additional 44 weeks. Subjects in the extension study had previously been treated an average of approximately 5 years earlier at Baylor College of Medicine under the direction of the Tovaxin inventor Jingwu Zhang, M.D., Ph.D with an early version of the T-cell vaccine.

Some patients in the open label Phase I/II studies also appear to experience an improvement of their Kurtzke Expanded Disability Status Scale (EDSS), a scoring method used to measure the disability of MS patients. Improvements in EDSS are not frequently observed in patients following treatment with other currently licensed therapies. Although the data from our Phase I/II trials appears to be promising, the Phase IIb trial is being conducted to confirm these results.

We also hold exclusive worldwide license for the intellectual property rights and research results of an autologous T-cell vaccine for RA from the Shanghai Institutes for Biological Sciences (SIBS), Chinese Academy of Sciences of the People's Republic of China.

Our RA T-cell vaccination (TCV) technology is conceptually similar to Tovaxin. RA is an autoimmune T-cell-mediated disease in which pathogenic T-cells trigger an inflammatory autoimmune response of the synovial joints of the wrists, shoulders, knees, ankles and feet which causes pain, stiffness, and swelling around the joints and erosion into cartilage and bone. The RA TCV technology allows the isolation of these pathogenic T-cells from synovial fluid drawn from a patient. These T-cells will be grown to therapeutic levels and attenuated by gamma irradiation in our laboratory. The attenuated T-cells will be injected subcutaneously into patients thereby inducing an immune response directed at the pathogenic T-cells in the patient’s body. This immune response regulates the level of pathogenic T-cells and potentially allows the reduction of joint swelling in RA patients. Human trials that have been conducted in China show minimal side-effects and promising efficacy measured as a reduction of joint swelling following the T-cell vaccination.

We also have an exclusive license from the University of Chicago, through its prime contractor relationship with Argonne National Laboratory, to a stem cell technology in which adult multipotent stem cells are derived from monocytes (white blood cells) obtained from the patient's own blood. We are initially pursuing indications in diabetes mellitus with our stem cell therapy and are conducting preclinical animal studies.

Our stem cell technology isolates novel multipotent stem cells derived from peripheral blood monocytes. *In vitro* experiments with monocyte-derived stem cells (MDSC) have shown their capacity to differentiate into a wide variety of cell types including pancreatic β cells. We have demonstrated that these pancreatic islets clusters derived from MDSCs are composed of three pancreatic cells types (α , β and δ). These islet clusters are responsive to glucose and mimic the normal pulsatile pattern observed in human islets. The importance of these stem cells is the ability to easily isolate them from an individual's circulating monocytes, expand them and administer them back into the same patient. This autologous approach provides a method to overcome any rejection issues and the need for immunosuppressant drugs, which are often associated with current islet cell transplantations. This technology may lead to the formation of an unlimited source of pancreatic islet cells suitable for an autologous cell therapy for the treatment of diabetes mellitus.

Our Executive Offices

Our principal executive and administrative office facility is located in The Woodlands, Texas at 2635 North Crescent Ridge Drive, The Woodlands, Texas 77381 and our telephone number is (281) 272-9331. We maintain a website at www.opexatherapeutics.com, however the information on our website is not part of this prospectus, and you should rely only on information contained in this prospectus when making a decision as to whether or not to invest in shares of our common stock.

RISK FACTORS

The shares offered hereby have not been approved or disapproved by the SEC or the securities regulatory authority of any state, nor has any such regulatory body reviewed this prospectus for accuracy or completeness. Investing in our common stock involves an unusually high degree of risk and our common stock should only be purchased by those who can afford to lose their entire investment. Therefore, prospective investors should carefully consider the following risk factors before purchasing the shares offered hereby.

Risks Related to Our Business

The following factors affect our business and the industry in which we operate. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known or which we currently consider immaterial may also have an adverse effect on our business. If any of the matters discussed in the following risk factors were to occur, our business, financial condition, results of operations, cash flows, or prospects could be materially adversely affected.

Our business is at an early stage of development.

Our business is at an early stage of development. We do not have any products in late-stage clinical trials or on the market. We are still in the early stages of identifying and conducting research on potential products. Only one of our products has progressed to the stage of being studied in human clinical trials in the United States (U.S.). Our potential products will require regulatory approval prior to marketing in the United States and other countries. Obtaining such approval will require significant research and development and preclinical and clinical testing. We may not be able to develop any products, to obtain regulatory approvals, to enter clinical trials for any of our product candidates, or to commercialize any products. Our product candidates may prove to have undesirable and unintended side effects or other characteristics adversely affecting their safety, efficacy or cost-effectiveness that could prevent or limit their use. Any product using any of our technology may fail to provide the intended therapeutic benefits, or achieve therapeutic benefits equal to or better than the standard of treatment at the time of testing or production.

We have a history of operating losses and do not expect to be profitable in the near future.

We have not generated any profits since our entry into the biotechnology business, have no source of revenues, and have incurred significant operating losses. We expect to incur additional operating losses for the foreseeable future and, as we increase our research and development activities, we expect our operating losses to increase significantly. We do not have any sources of revenues and may not have any in the foreseeable future.

We will need additional capital to conduct our operations and develop our products and our ability to obtain the necessary funding is uncertain.

We need to obtain significant additional capital resources from sources including equity and/or debt financings, license arrangements, grants and/or collaborative research arrangements in order to develop products and continue our business. As of September 30, 2007, we had cash, cash equivalents and marketable securities of approximately \$5.8 million. Our current burn rate is approximately \$1 million per month excluding capital expenditures. We will need to raise additional capital to fund our working capital needs beyond first quarter 2008. We must rely upon third-party debt or equity funding and we can provide no assurance that we will be successful in any funding effort. The failure to raise such funds will necessitate the curtailment or ceasing of operations and impact the completion of the clinical trials.

The timing and degree of any future capital requirements will depend on many factors, including:

- the accuracy of the assumptions underlying our estimates for capital needs in 2007 and beyond;
- scientific progress in our research and development programs;
- the magnitude and scope of our research and development programs;
- our ability to establish, enforce and maintain strategic arrangements for research, development, clinical testing, manufacturing and marketing;
- our progress with preclinical development and clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims; and
- the number and type of product candidates that we pursue.

We do not have any committed sources of capital, although we have issued and outstanding warrants that, if exercised, would result in an equity capital raising transaction. Additional financing through strategic collaborations, public or private equity financings, capital lease transactions or other financing sources may not be available on acceptable terms, or at all. Additional equity financings could result in significant dilution to our stockholders. Further, if additional funds are obtained through arrangements with collaborative partners, these arrangements may require us to relinquish rights to some of our technologies, product candidates or products that we would otherwise seek to develop and commercialize ourselves. If sufficient capital is not available, we may be required to delay, reduce the scope of or eliminate one or more of our programs, any of which could have a material adverse effect on our financial condition or business prospects.

We have a "going-concern qualification" in our certifying accountant's financial statement report, which may make capital raising more difficult and may require us to scale back or cease operations.

The report of our auditors includes a going concern qualification which indicates an absence of obvious or reasonably assured sources of future funding that will be required by us to maintain ongoing operations. To date we have successfully funded Opexa by attracting additional issues of equity. We believe that our ongoing efforts will continue to successfully fund operations until positive cash flow is attained. However, there is no guarantee that our efforts will be able to attract additional necessary equity and/or debt investors. If we are unable to obtain this additional funding, we may not be able to continue operations. To date we have been able to obtain funding and meet our obligations in a reasonably timely manner. However, if in the future we are unsuccessful in attracting new sources of funding then we will be unable to continue in business.

Clinical trials are subject to extensive regulatory requirements, very expensive, time-consuming and difficult to design and implement. Our products may fail to achieve necessary safety and efficacy endpoints during clinical trials.

Human clinical trials are very expensive and difficult to design and implement, in part because they are subject to rigorous Food and Drug Administration (FDA) requirements, and must otherwise comply with federal, state and local requirements and policies of the medical institutions where they are conducted. The clinical trial process is also time-consuming. We estimate that clinical trials of our product candidates will take at least several years to complete. Furthermore, failure can occur at any stage of the trials, and we could encounter problems that cause us to abandon or repeat clinical trials. The commencement and completion of clinical trials may be delayed by several factors, including:

- FDA or Institutional Review Board (IRB) objection to proposed protocols;
- discussions or disagreement with FDA over the adequacy of trial design to potentially demonstrate effectiveness, and subsequent design modifications;
- unforeseen safety issues;
- determination of dosing issues and related adjustments;
- lack of effectiveness during clinical trials;
- slower than expected rates of patient recruitment;
- product quality problems (e.g., sterility or purity)
- challenges to patient monitoring and data collection during or after treatment (for example, patients' failure to return for follow-up visits); and
- failure of medical investigators to follow our clinical protocols.

In addition we or the FDA (based on its authority over clinical studies) may delay a proposed investigation or suspend clinical trials in progress at any time if it appears that the study may pose significant risks to the study participants or other serious deficiencies are identified.

We are dependent upon our management team and a small number of employees.

Our business strategy is dependent upon the skills and knowledge of our management team. We believe that the special knowledge of these individuals gives us a competitive advantage. If any critical employee leaves, we may be unable on a timely basis to hire suitable replacements to effectively operate our business. We also operate with a very small number of employees and thus have little or no backup capability for their activities. The loss of the services of any member of our management team or the loss of a number of other employees could have a material adverse effect on our business.

We are dependent on contract research organizations and other contractors for clinical testing and for certain research and development activities, thus the timing and adequacy of our clinical trials and such research activities are, to a certain extent, beyond our control.

The nature of clinical trials and our business strategy requires us to rely on contract research organizations, independent clinical investigators and other third party service providers to assist us with clinical testing and certain research and development activities. For example, our current Phase IIb clinical study of Tovaxin for MS is being managed by the contract research organization PharmaNet, LLC. As a result, our success is dependent upon the success of these outside parties in performing their responsibilities. Although we believe our contractors are economically motivated to perform on their contractual obligations, we cannot directly control the adequacy and timeliness of the resources and expertise applied to these activities by our contractors. If our contractors do not perform their activities in an adequate or timely manner, the development and commercialization of our drug candidates could be delayed.

If we fail to meet our obligations under our license agreements, we may lose our rights to key technologies on which our business depends.

Our business depends on three licenses from third parties. These third party license agreements impose obligations on us, such as payment obligations and obligations to diligently pursue development of commercial products under the licensed patents. If a licensor believes that we have failed to meet our obligations under a license agreement, the licensor could seek to limit or terminate our license rights, which could lead to costly and time-consuming litigation and, potentially, a loss of the licensed rights. During the period of any such litigation, our ability to carry out the development and commercialization of potential products could be significantly and negatively affected. If our license rights were restricted or ultimately lost, our ability to continue our business based on the affected technology platform could be severely adversely affected.

Our current research and manufacturing facility is not large enough to manufacture future stem cell and T-cell therapies.

We conduct our research and development in a 10,200 square foot facility in The Woodlands, Texas, which includes an approximately 800 square foot suite of three rooms for the manufacture of stem cell and T-cell therapies through Phase III trials. Our current facility is not large enough to conduct commercial-scale manufacturing operations. We will need to expand further our manufacturing staff and facility, obtain a new facility or contract with corporate collaborators or other third parties to assist with future drug production.

In the event that we decide to establish a commercial-scale manufacturing facility, we will require substantial additional funds and will be required to hire and train significant numbers of employees and comply with applicable regulations, which are extensive. We do not have funds available for building a manufacturing facility, and we may not be able to build a manufacturing facility that both meets regulatory requirements and is sufficient for our commercial-scale manufacturing.

We may arrange with third parties for the manufacture of our future products. However, our third-party sourcing strategy may not result in a cost-effective means for manufacturing our future products. If we employ third-party manufacturers, we will not control many aspects of the manufacturing process, including compliance by these third parties with the FDA's current Good Manufacturing Practices and other regulatory requirements. We further may not be able to obtain adequate supplies from third-party manufacturers in a timely fashion for development or commercialization purposes, and commercial quantities of products may not be available from contract manufacturers at acceptable costs.

Patents obtained by other persons may result in infringement claims against us that are costly to defend and which may limit our ability to use the disputed technologies and prevent us from pursuing research and development or commercialization of potential products.

A number of pharmaceutical, biotechnology and other companies, universities and research institutions have filed patent applications or have been issued patents relating to cell therapy, stem cells, T-cells, and other technologies potentially relevant to or required by our expected products. We cannot predict which, if any, of such applications will issue as patents or the claims that might be allowed. We are aware that a number of companies have filed applications relating to stem cells. We are also aware of a number of patent applications and patents claiming use of stem cells and other modified cells to treat disease, disorder or injury.

If third party patents or patent applications contain claims infringed by either our licensed technology or other technology required to make and use our potential products and such claims are ultimately determined to be valid, there can be no assurance that we would be able to obtain licenses to these patents at a reasonable cost, if at all, or be able to develop or obtain alternative technology. If we are unable to obtain such licenses at a reasonable cost, we may not be able to develop some products commercially. There can be no assurance that we will not be obliged to defend ourselves in court against allegations of infringement of third party patents. Patent litigation is very expensive and could consume substantial resources and create significant uncertainties. An adverse outcome in such a suit could subject us to significant liabilities to third parties, require disputed rights to be licensed from third parties, or require us to cease using such technology.

If we are unable to obtain future patents and other proprietary rights our operations will be significantly harmed.

Our ability to compete effectively is dependent in part upon obtaining patent protection relating to our technologies. The patent positions of pharmaceutical and biotechnology companies, including ours, are uncertain and involve complex and evolving legal and factual questions. The coverage sought in a patent application can be denied or significantly reduced before or after the patent is issued. Consequently, we do not know whether the patent applications for our technology will result in the issuance of patents, or if any future patents will provide significant protection or commercial advantage or will be circumvented by others. Since patent applications are secret until the applications are published (usually eighteen months after the earliest effective filing date), and since publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain that the inventors of our licensed patents were the first to make the inventions covered by the patent applications or that the licensed patent applications were the first to be filed for such inventions. There can be no assurance that patents will issue from the patent applications or, if issued, that such patents will be of commercial benefit to us, afford us adequate protection from competing products, or not be challenged or declared invalid.

Our competition includes fully integrated biopharmaceutical and pharmaceutical companies that have significant advantages over us.

The markets for therapeutic stem cell products, multiple sclerosis products, and rheumatoid arthritis products are highly competitive. We expect that our most significant competitors are fully integrated pharmaceutical companies and more established biotechnology companies. These companies are developing stem cell-based products and they have significantly greater capital resources and expertise in research and development, manufacturing, testing, obtaining regulatory approvals, and marketing than we currently do. Many of these potential competitors are further along in the process of product development and also operate large, company-funded research and development programs. As a result, our competitors may develop more competitive or affordable products, or achieve earlier patent protection or product commercialization than we are able to achieve. Competitive products may render any products or product candidates that we develop obsolete.

Restrictive and extensive government regulation could slow or hinder our production of a cellular product.

The research and development of stem cell therapies is subject to and restricted by extensive regulation by governmental authorities in the United States and other countries. The process of obtaining FDA and other necessary regulatory approvals is lengthy, expensive and uncertain. We may fail to obtain the necessary approvals to continue our research and development, which would hinder our ability to manufacture or market any future product.

To be successful, our product candidates must be accepted by the health care community, which can be very slow to adopt or unreceptive to new technologies and products.

Our product candidates, if approved for marketing, may not achieve market acceptance since hospitals, physicians, patients or the medical community in general may decide to not accept and utilize these products. The product candidates that we are attempting to develop represent substantial departures from established treatment methods and will compete with a number of more conventional drugs and therapies manufactured and marketed by major pharmaceutical companies. The degree of market acceptance of any of our developed products will depend on a number of factors, including:

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

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

Risks Related to Our Common Stock

There is currently a limited market for our common stock, and any trading market that exists in our common stock may be highly illiquid and may not reflect the underlying value of our net assets or business prospects.

Although our common stock is traded on the NASDAQ Capital Market, there is currently a limited market for our common stock and there can be no assurance that an improved market will ever develop. Investors are cautioned not to rely on the possibility that an active trading market may develop.

As our share price is volatile, we may be or become the target of securities litigation, which is costly and time-consuming to defend.

In the past, following periods of market volatility in the price of a company's securities or the reporting of unfavorable news, security holders have often instituted class action litigation. If the market value of our common stock experiences adverse fluctuations and we become involved in this type of litigation, regardless of the outcome, we could incur substantial legal costs and our management's attention could be diverted from the operation of our business, causing our business to suffer.

Our "blank check" preferred stock could be issued to prevent a business combination not desired by management or our current majority shareholders.

Our articles of incorporation authorize the issuance of "blank check" preferred stock with such designations, rights and preferences as may be determined by our board of directors without shareholder approval. Our preferred stock could be utilized as a method of discouraging, delaying, or preventing a change in our control and as a method of preventing shareholders from receiving a premium for their shares in connection with a change of control.

Future sales of our common stock in the public market could lower our stock price.

We may sell additional shares of common stock in subsequent public or private offerings. We may also issue additional shares of common stock to finance future acquisitions. We cannot predict the size of future issuances of our common stock or the effect, if any, that future issuances and sales of shares of our common stock will have on the market price of our common stock. Sales of substantial amounts of our common stock (including shares issued in connection with an acquisition), or the perception that such sales could occur, may adversely affect prevailing market prices for our common stock.

We presently do not intend to pay cash dividends on our common stock.

We currently anticipate that no cash dividends will be paid on the common stock in the foreseeable future. While our dividend policy will be based on the operating results and capital needs of the business, it is anticipated that all earnings, if any, will be retained to finance the future expansion of the our business.

There are a large number of shares underlying our warrants that may be available for future sale. Substantial sales of our common stock by our current holders or us could cause our stock price to decline and issuances by us may dilute your ownership interest in us.

We are unable to predict whether significant amounts of our common stock will be sold by our current holders after this offering. Any sales of substantial amounts of our common stock in the public market by our current holders or us, or the perception that these sales might occur, such as might arise from exercise of outstanding warrants, could lower the market price of our common stock. Further, if we issue additional equity securities to raise additional capital, your ownership interest in us may be diluted and the value of your investment may be reduced. Please read "Description of Securities" for information about the number of shares that will be outstanding and that could be acquired through warrant exercise after this offering.

If we do not maintain an effective registration statement or comply with applicable state securities laws, you may not be able to exercise the warrants.

In order for you to be able to exercise the warrants offered hereby, the underlying shares must be covered by an effective registration statement and qualify for an exemption under the securities laws of the state in which you live. We cannot assure you that we will continue to maintain a current registration statement relating to the offer and sale of the warrants and the common stock underlying these warrants, or that an exemption from registration or qualification will be available throughout their term. This may have an adverse effect on the demand for the warrants and the prices that can be obtained from reselling them.

FORWARD LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933. These statements relate to future events and/or future financial performance and involve known and unknown risks, uncertainties and other factors that may cause the actual results, levels of our activity, performance or achievements or the industry in which we operate to be materially different from any future results, levels of activity, performance or achievements expressed or implied by the forward-looking statements. These risks and other factors include those listed under “Risk Factors” and those described elsewhere in this prospectus.

In some cases, you can identify forward-looking statements by our use of terms such as “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential,” or the negative of these terms or other comparable terminology. These statements are only predictions. Actual events or results may differ materially. In evaluating these statements, you should specifically consider various factors, including the risks outlined under “Risk Factors.” These factors may cause our actual results to differ materially from any forward-looking statement.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, levels of activity, performance, or achievements. Moreover, we do not assume responsibility for the accuracy and completeness of these forward-looking statements. We do not intend to update any of the forward-looking statements after the date of this prospectus to conform prior statements to actual results.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to “incorporate by reference” the information we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information we file with the SEC after the date of this prospectus will automatically update and may supersede this information. We are incorporating by reference into this prospectus the documents listed below:

- our Annual Report on Form 10-KSB for the year ended December 31, 2006 filed by us on March 16, 2007 and as amended on Form 10-KSB/A filed by us on November 9, 2007 and further amended on Form 10-KSB/A filed by us on November 30, 2007;
- our Quarterly Reports on Form 10-QSB for the quarterly periods ended March 31, 2007 (filed by us on May 14, 2007 and as amended on Form 10-QSB/A filed by us on November 30, 2007), June 30, 2007 (filed by us on August 14, 2007 and as amended on Form 10-QSB/A filed by us on November 30, 2007) and September 30, 2007 (filed by us on November 2, 2007 and as amended on Form 10-QSB/A filed by us on November 30, 2007);
- our Current Reports on Form 8-K filed by us on March 19, 2007, April 3, 2007, May 15, 2007, June 21, 2007, August 3, 2007, September 20, 2007, October 3, 2007, as amended by 8-K/A on November 9, 2007, November 5, 2007, November 29, 2007 and December 10, 2007; and
- the description of our common stock and warrants contained in our Registration Statement on Form SB-2, filed with the SEC on July 19, 2005, including any amendments or reports filed for the purposes of updating this description.

All documents we file (but not furnish) under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this prospectus and before the termination of the offering are also incorporated by reference and are an important part of this prospectus. Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus is modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded does not, except as so modified or superseded, constitute a part of this prospectus.

You may request a copy of these filings, at no cost, by written or oral request made to us at the following address or telephone number:

Opexa Therapeutics, Inc.
2635 N. Crescent Ridge Drive
The Woodlands, Texas 77381
(281) 272-9331
Attention: Corporate Secretary

USE OF PROCEEDS

The selling stockholders will receive all of the proceeds from the sale of the shares of our common stock covered hereby, or interests therein. We will not receive any of the proceeds from any such sale by any selling stockholder. See “Selling Stockholders.”

SELLING STOCKHOLDERS

The common stock covered by this prospectus is to be offered for the account of the selling stockholders in the following table. The selling stockholders may from time to time sell or otherwise dispose of all, some or none of the shares of common stock covered hereby, or interests therein.

The following table, which we have prepared based on information provided to us by the applicable selling stockholder, sets forth the name, the number of shares of common stock beneficially owned by the selling stockholders and the number of shares of common stock that may be sold or otherwise disposed of by the selling stockholders under this prospectus. Unless set forth below, none of the selling stockholders selling in connection with the prospectus has held any position or office with, been employed by, or otherwise has had a material relationship with us or any of our affiliates during the three years prior to the date of the prospectus.

<u>Name of Selling Stockholder</u>	<u>Footnote Numbers</u>	<u>Number of Shares of Common Stock Beneficially Owned (1)</u>	<u>Number of Shares of Common Stock Offered Hereunder</u>	<u>Number and % of Outstanding Shares of Common Stock Owned After Completion of Offering (2)</u>	
				<u>Number</u>	<u>%</u>
682501 Alberta Ltd.	3.	3,889	3,889	-	*
AFDSMSSAS, L.P.	4.	3,267	3,267	-	*
Albert and Margaret Alkek Foundation	5.	673,889	38,889	635,000	9.29%
Alkek & Williams Ventures	6.	406,889	31,889	375,000	5.50%
Alpine Atlantic Asset Management AG	7.	81,934	81,934	-	*
Anastasios & Tabitha Belesis	8.	187	187	-	*
Andrew B. & Shanna Sue Linbeck	9.	7,933	7,933	-	*
Anthony J. Spatacco, Jr.	10.	4,861	4,861	-	*
Anthony M. Sensoli	11.	16,621	16,621	-	*
Anthony M. Sensoli, IRA Charles Schwab & Co., Inc. Custodian	12.	2,946	2,946	-	*
Archie McK Malone	13.	8,793	8,793	-	*
Armand LaSorsa	14.	17	17	-	*
Arthur J. & Phyllis C. Goodwin 2001 Family Trust Dated 4-26-01	15.	1,964	1,964	-	*
Ball Family Trust dtd 03/08/96, Richard K. Ball & Polly Ball Co-TTEEs	16.	3	3	-	*
Beverly B. Arnold	17.	15,556	15,556	-	*
Beverly E. Wrubel	18.	1,957	1,957	-	*
Billie Willmon Jenkin	19.	3,982	3,982	-	*
Bobby D. Perry	20.	7,778	7,778	-	*
Bradley S. Stewart	21.	5,086	5,086	-	*
Brewer & Pritchard, PC	22.	31,361	31,361	-	*
Bruce C. Marek	23.	20,320	20,320	-	*
Bruno Nordberg	24.	3,897	3,897	-	*
Bruno or Joan A. Nordberg, JWROS	25.	4,888	4,888	-	*
C. William Rouse	26.	107,665	2,514	105,150	1.55%
Cameron Living Trust Ltd 8/31/95	27.	1,955	1,955	-	*
Capital Growth Planning	28.	5	5	-	*
Carmelo Troccoli	29.	35	35	-	*
Centrum Bank AG	30.	19,489	19,489	-	*
Charles L. Bradley	31.	7,778	7,778	-	*
Cimarron Biomedical Equity Master Fund, L.P.	32.	38,889	38,889	-	*
Citigroup Global Markets Custodian FBO Mary Ann Wesner, 2004 Roth IRA	33.	876	876	-	*
Citigroup Global Markets Custodian FBO Mary Ann Wesner, 2005 Roth IRA	34.	478	478	-	*
Citigroup Global Markets Custodian FBO Terry Wesner, 2004 Roth IRA	35.	681	681	-	*
Citigroup Global Markets Custodian FBO Terry Wesner, 2005 Roth IRA	36.	876	876	-	*
CKW LLC	37.	3,889	3,889	-	*
Clariden Investments LTD	38.	10,160	10,160	-	*
Clemente Capital Management, LLC	39.	373	373	-	*
Crestview Capital Master, LLC	40.	116,667	116,667	-	*
Crutchfield Family 1976 Trust	41.	9,751	9,751	-	*
Dale W. Spradling	42.	33,314	20,314	13,000	*
Daniel L. Zimmerman	43.	4,896	4,896	-	*

<u>Name of Selling Stockholder</u>	<u>Footnote Numbers</u>	<u>Number of Shares of Common Stock Beneficially Owned (1)</u>	<u>Number of Shares of Common Stock Offered Hereunder</u>	<u>Number and % of Outstanding Shares of Common Stock Owned After Completion of Offering (2)</u>	
				<u>Number</u>	<u>%</u>
David B. McWilliams	44.	95,593	13,393	82,200	1.21%
David Carl Lustig, III	45.	3,111	3,111	-	*
David Livney	46.	2,333	2,333	-	*
David P. Haswell	47.	1,997	1,997	-	*
David R. & Alice M. Evers	48.	15	15	-	*
Davis Investments V LP	49.	167,522	138,603	28,919	*
Delaware Charter Guaranty & Trust fbo Andre Guay, IRA	50.	1,589	1,589	-	*
Delaware Charter Guaranty & Trust fbo Gisele Guay, IRA	51.	2,383	2,383	-	*
Delaware Charter Guaranty & Trust fbo Ronald Brangwyn, IRA	52.	2,004	2,004	-	*
Dietrich & Rosemarie Riemer	53.	4,667	4,667	-	*
DLD Family Investments, LLC	54.	361,111	31,111	330,000	4.85%
Donald G. Stewart	55.	19,014	19,014	-	*
Donald J. Zinda	56.	3	3	-	*
Donald M. Ureel Trust dtd 09/24/97; Donald M. Ureel, TTEE	57.	24	24	-	*
Donald Zinman	58.	21	21	-	*
Douglas Alan Jenkin	59.	7,831	7,831	-	*
Douglas J. Cook & Christine Cook	60.	3	3	-	*
Douglas Miller	61.	655	655	-	*
E. Elaine Schuster	62.	3,918	3,918	-	*
E55 LP	63.	3,889	3,889	-	*
Edward W. Gray and Sharon H. Gray	64.	1,951	1,951	-	*
Elizabeth J. Hanson	65.	4,667	4,667	-	*
Elizabeth J. Hanson, IRA	66.	1,960	1,960	-	*
Enable Growth Partners LP	67.	124,011	124,011	-	*
Enable Opportunity Partners LP	68.	14,000	14,000	-	*
Ervin Living Trust	69.	3,991	3,991	-	*
Ervin Living Trust Dtd.7/6/95, Robert D. Ervin & Rita Y. Ervin Co-TTEES	70.	3,889	3,889	-	*
First Trust Corporation TTEE FBO: Lynn C. Kalcic	71.	939	939	-	*
First Trust Corporation TTEE FBO: Mary A. Kalcic	72.	2,582	2,582	-	*

<u>Name of Selling Stockholder</u>	<u>Footnote Numbers</u>	<u>Number of Shares of Common Stock Beneficially Owned (1)</u>	<u>Number of Shares of Common Stock Offered Hereunder</u>	<u>Number and % of Outstanding Shares of Common Stock Owned After Completion of Offering (2)</u>	
				<u>Number</u>	<u>%</u>
Frank M. Mandola	73.	8,128	8,128	-	*
Fred S. Harper	74.	10,733	10,733	-	*
Gary Hanson & Elizabeth Hanson	75.	2,089	2,089	-	*
Gemini Master Fund, Ltd.	76.	19,585	19,585	-	*
Geoffrey Kopecky	77.	56	56	-	*
George & Linda Boston	78.	770	770	-	*
George E. Liberato	79.	4,064	4,064	-	*
George Jarkesy, Jr.		121,250	121,250	-	*
Gerald L. King & Sherry J. King	80.	3	3	-	*
Gerald W. Brown	81.	3	3	-	*
Greeley Orthodontic Center, P.C. Profit Sharing Trust fbo Gary J. Kloberdanz	82.	17	17	-	*
Gregg Lerman	83.	373	373	-	*
H. Michael Lambert	84.	24,590	20,090	4,500	*
Harold E. Tellefsen Trust	85.	5,454	5,454	-	*
Harry Groszecki	86.	7,000	7,000	-	*
HRBFA Cust. of the IRA FBO Mary Ann Sharrow	87.	7,074	7,074	-	*
HRBFA Cust. of the IRA FBO Paul G. Sharrow	88.	6,681	6,681	-	*
I. Dwyane Davis	89.	7,785	7,785	-	*
Insiders Trend Fund LP	90.	8,535	8,535	-	*
J. Roy Jones & James M. Jones, Charitable Remainder Unitrust	91.	3	3	-	*
Jack Dulworth	92.	7,778	7,778	-	*
Jack M. Franks Revocable Trust dtd 06/25/91; Jack M. Franks, TTEE)	93.	10	10	-	*
James A. Boston	94.	2,466	2,466	-	*
James E. Striedel	95.	10,099	10,099	-	*
James G. Geistfeld Living Trust	96.	1,958	1,958	-	*
Jarkesy Foundation, Inc.	97.	40,876	40,876	-	*
Jaye S. Venuti, D.D.S. Retirement Plan Trust; Jaye S. Venuti & Michael Yokoyama, TTEES	98.	14	14	-	*
Jerome T. Usalis	99.	56,673	56,673	-	*
Jerry Sexton	100.	395	395	-	*
Jessica Spradling	101.	23,333	23,333	-	*

<u>Name of Selling Stockholder</u>	<u>Footnote Numbers</u>	<u>Number of Shares of Common Stock Beneficially Owned (1)</u>	<u>Number of Shares of Common Stock Offered Hereunder</u>	<u>Number and % of Outstanding Shares of Common Stock Owned After Completion of Offering (2)</u>	
				<u>Number</u>	<u>%</u>
Jimmy C. Williams	102.	41,452	5,121	36,331	*
John C. Bult, TTEE	103.	3	3	-	*
John G. Aiko, Jr.	104.	34	34	-	*
John H. Crutchfield	105.	19,508	19,508	-	*
John Parmigiani	106.	187	187	-	*
John T. Borgese	107.	9,285	9,285	-	*
Jonathan Rich	108.	33	33	-	*
Joseph D. Mandola	109.	16,081	16,081	-	*
Joseph L. Draskovich	110.	1,996	1,996	-	*
Joyce E. Burris	111.	2,001	2,001	-	*
JSM Capital Holdings Corp.	112.	123	123	-	*
Kalcic Exemption Trust	113.	1,999	1,999	-	*
Kenneth & Jill Flint, TTEES – The Kenneth W. Flint Family Protection Tr.	114.	6	6	-	*
Kenneth O. Stahl/Frederick R. Stahl, Jr. (POA)	115.	2	2	-	*
Kirk Folkerts	116.	19,362	14,046	5,317	*
Lakeview Direct Investments, LP	117.	15,556	15,556	-	*
Larry R. Cramer	118.	34	34	-	*
Lawrence S. Yunker	119.	1,167	1,167	-	*
LB (Swiss) Private Bank LTD	120.	5,078	5,078	-	*
Linda M. Barone/Larry R. Zilli	121.	4,898	4,898	-	*
Liparus, LLC	122.	1,956	1,956	-	*
Lippert Heilshorn & Associates Inc.	123.	3,101	3,101	-	*
Lone Star No. 1, Ltd	124.	7,933	7,933	-	*
Lorie Cook	125.	262	262	-	*
Louis R. Reif	126.	7,250	4,990	2,260	*
Lynn Rach	127.	8	8	-	*
Marcus F. Wray	128.	3,889	3,889	-	*
Mark A. Stewart	129.	23,267	17,951	5,317	*
Mark S. Boland	130.	7,857	7,857	-	*
Mark Stutzman	131.	535	535	-	*
Mary A. Kalcic Irrevocable Trust dtd 11/11/87 – Paul Kalcic, TTEE	132.	3	3	-	*

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				<u>Number</u>	<u>%</u>
Michael and Kristine Marrale	133.	4,667	4,667	-	*
Michael C. Neumann	134.	1,978	1,978	-	*
Michael Hamblett	135.	9,751	9,751	-	*
Michael K. Boudreaux	136.	1,955	1,955	-	*
Millard B. Ryland, IRA	137.	5,444	5,444	-	*
Mitchell Sassower	138.	2,333	2,333	-	*
Monarch Capital Group, LLC	139.	85	85	-	*
Nancy A. Korpi	140.	21	21	-	*
Nancy R. Greer Linn	141.	3,889	3,889	-	*
Nelson Wooster Living Trust; Nelson Wooster, TTEE	142.	2	2	-	*
NFS LLC/FMTC FBO Richard E Crawford	143.	9,792	9,792	-	*
Nick Lippuner & Marianne Lippuner	144.	5,895	5,895	-	*
Norman R. Morris Living Trust	145.	3,889	3,889	-	*
Oxnard Camarillo Anesthesiologist Group MPP; Vance L. Kalcic TTEE	146.	17	17	-	*
Pamela Dru Sutton	147.	4,888	4,888	-	*
Panacea Fund, LLC	148.	38,967	38,967	-	*
Pankaj A. Patel	149.	19,534	19,534	-	*
Parsifal Investments, L.P.	150.	8,167	8,167	-	*
Patrick Linbeck	151.	7,861	2,861	5,000	*
Paul G. Sharrow	152.	1,958	1,958	-	*
Paul Masters, IRA	153.	9,725	9,725	-	*
Pershing LLC as Custodian FBO Kinnary Patel Rollover IRA	154.	7,778	7,778	-	*
Pershing LLC as Custodian FBO Kinnary Patel Roth IRA	155.	7,778	7,778	-	*
Peter Bischofberger	156.	5	5	-	*
Pinnacle Trust Co., LTA	157.	38,889	38,889	-	*
Plum Glen Partners, L.P.; Jerry Mendelson General Partner	158.	17	17	-	*
Provident Premier Master Fund, Ltd	159.	39,067	39,067	-	*
Ratcliff Investments; Attn: Robert Ratcliff	160.	17	17	-	*
Renaissance Interests, L.P.	161.	31,333	16,333	15,000	*

<u>Name of Selling Stockholder</u>	<u>Footnote Numbers</u>	<u>Number of Shares of Common Stock Beneficially Owned (1)</u>	<u>Number of Shares of Common Stock Offered Hereunder</u>	<u>Number and % of Outstanding Shares of Common Stock Owned After Completion of Offering (2)</u>	
				<u>Number</u>	<u>%</u>
Richard N. Ernst	162.	19,585	19,585	-	*
Richard T. Jeleniewski	163.	4,906	4,906	-	*
Robert F. Donathan	164.	19,508	19,508	-	*
Robert H. & Joy D. Caldwell, TTEES – Caldwell Family Trust – U/A dated 7/22/85	165.	2	2	-	*
Roland Hartman	166.	29,796	9,796	20,000	*
Ronald Brangwyn	167.	3,889	3,889	-	*
Rudy Aguirre and Therese Mosqueda Ponce	168.	2,004	2,004	-	*
S. Edmund Resciniti	169.	7,778	7,778	-	*
SAA Trust	170.	3,897	3,897	-	*
SAA Trust, Paul & MaryAnn Mallis TTEES	171.	2,934	2,934	-	*
Salient Partners	172.	8,792	8,792	-	*
Sam Buck	173.	4,667	4,667	-	*
Sanders Morris Harris	174.	49,348	49,348	-	*
Sandra L. Livney	175.	15,999	2,333	13,666	*
Schroder & Co Bank AG	176.	79,533	34,533	45,000	*
Scott B. Seaman	177.	469,522	8,883	428,750	6.37%
Scott Shapiro	178.	373	373	-	*
Shantilal C. Patidar	179.	13,411	8,911	4,500	*
SIBEX Capital Fund, Inc.	180.	46,667	46,667	-	*
SMI Re Limited	181.	242,305	222,305	20,000	*
Snehal Patel	182.	37,622	32,232	5,390	*
Snehal S Patel & Kinnary Patel, Jt. Tenants in Common	183.	180,080	64,580	115,500	1.71%
Stahl Family Revocable Living Trust dated 8-23-01	184.	1,996	1,996	-	*
Starboard Capital Markets	185.	100	100	-	*
Stephen Cox	186.	271	271	-	*
Sterling Trust Co fbo Carol A. Wynn	187.	3,889	3,889	-	*
Sterling Trust Company, Custodian fbo Harold E. Tellefsen	188.	3,622	3,622	-	*
Steven Sack	189.	4,667	4,667	-	*
Stone & Sutton, P.A. P/S Trust Pam Sutton, Trustee	190.	1,957	1,957	-	*
Suzette Brown Special Needs Trust – Melodie Z. Scott, Trustee	191.	5	5	-	*

<u>Name of Selling Stockholder</u>	<u>Footnote Numbers</u>	<u>Number of Shares of Common Stock Beneficially Owned (1)</u>	<u>Number of Shares of Common Stock Offered Hereunder</u>	<u>Number and % of Outstanding Shares of Common Stock Owned After Completion of Offering (2)</u>	<u>Number</u>	<u>%</u>
Sylvan Associates; Paul A. Kalcic Managing Partner	192.	3	3	-		*
T. William Merrill	193.	7,778	7,778	-		*
TCMP3 Partners, L.P.	194.	19,578	19,578	-		*
Terry H. Wesner	195.	33,958	20,301	13,657		*
Terry Wesner & MaryAnn Wesner	196.	10,045	10,045	-		*
The Barr Asset Family Lt. Partnership, Warren Barr, General Partner	197.	3	3	-		*
The G. W. Sleezer Revocable Trust dtd 12/04/89	198.	31	31	-		*
The Hazen A. Sandwick & Josephine Sandwick Revocable Living Trust	199.	6	6	-		*
Thomas K. Benedict & Liesbeth L. Benedict	200.	20	20	-		*
Thomas S. Brower	201.	2	2	-		*
Thomas Suppanz	202.	350	350	-		*
Thomas Thompson	203.	463	463	-		*
Timothy L. Brawner	204.	1,958	1,958	-		*
Todd R. Allen	205.	5,855	5,855	-		*
Tom Tice	206.	262	262	-		*
Trappe & Dusseault P.A. Profit Sharing Plan Trust 59-2351454; Owen S. Trappe & Brian Dusseault, TTEES	207.	17	17	-		*
Trevor J. Brown, Inc. DB Pension Plan, Trevor J. Brown &/or Annette Kowalaski, TTEES	208.	15	15	-		*
University of Chicago		53,462	53,462	-		*
vFinance Managed by Jonathan C. Rich	209.	859	859	-		*
Walter Miller	210.	681	681	-		*
Walter W. Pollack, Jr.	211.	23,333	23,333	-		*
Yellowstone Equity Partners, Ltd.	212.	15,167	15,167	-		*

FOOTNOTES:

1. Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes voting or investment power with respect to securities. Shares of common stock subject to options or warrants currently exercisable or exercisable within 60 days of the date hereof are deemed outstanding for computing the percentage of the person holding such option or warrant but are not deemed outstanding for computing the percentage of any other person.
2. Percentage is based on 6,696,784 shares of common stock outstanding.
3. Includes 2,223 shares of common stock underlying a Series C warrant.
4. Includes 1,867 shares of common stock underlying a Series C warrant. Saleh M Shenaq exercises voting and dispositive power over all of the shares beneficially owned by AFDSMSSAS.
5. Number of shares of common stock beneficially owned and number of shares of common stock offered includes 22,222 shares of common stock underlying a Series C warrant. Albert & Margaret Alkek Foundation is a private investment fund. Scott Seaman exercises voting and dispositive power over all of the shares beneficially owned by Albert & Margaret Alkek Foundation. Number of shares beneficially owned includes 135,000 shares of common stock underlying an April 2006 warrant.
6. Number of shares of common stock beneficially owned and number of shares of common stock offered includes 18,223 shares of common stock underlying a Series C warrant. Alkek & Williams Ventures is a private investment fund. Scott Seaman exercises voting and dispositive power over all of the shares beneficially owned by Alkek & Williams Ventures. Number of shares beneficially owned includes 125,000 shares of common stock underlying an April 2006 warrant.
7. Includes 39,620 shares of common stock underlying a Series C warrant. Alpine Atlantic Asset Management AG is a private investment fund. Willy Betschart exercises voting and dispositive power over all of the shares beneficially owned Alpine, a Zurich based private investment fund.
8. Includes 187 shares of common stock underlying a broker warrant. Anastasios and Tabitha Belesis are financial consultants and acquired these securities in connection with our June/July 2005 offering.
9. Includes 4,534 shares of common stock underlying a Series C warrant.
10. Includes 2,350 shares of common stock underlying a Series C warrant.
11. Includes 8,041 shares of common stock underlying a Series C warrant.
12. Includes 1,427 shares of common stock underlying a Series C warrant. Anthony M. Sensoli exercises voting and dispositive power over all of the shares beneficially owned by Anthony M. Sensoli, IRA Charles Schwab & Co., Inc. Custodian.
13. Includes 4,596 shares of common stock underlying a Series C warrant.
14. Includes 17 shares of common stock underlying a broker warrant.
15. Includes 951 shares of common stock underlying a Series C warrant. Arthur J. Goodwin exercises voting and dispositive power over all of the shares beneficially owned by Arthur J. & Phyllis C. Goodwin 2001 Family Trust Dated 4-26-01.
16. Includes 4 shares of common stock underlying a broker warrant.

17. Includes 8,890 shares of common stock underlying a Series C warrant.
18. Includes 947 shares of common stock underlying a Series C warrant.
19. Includes 1,933 shares of common stock underlying a Series C warrant.
20. Includes 4,445 shares of common stock underlying a Series C warrant.
21. Includes 2,478 shares of common stock underlying a Series C warrant.
22. Includes 1,778 shares of common stock underlying a Series C warrant. Brewer and Pritchard, PC is a professional corporation. Thomas Pritchard exercises voting and dispositive power over all of the shares beneficially owned by Brewer and Pritchard PC.
23. Includes 9,898 shares of common stock underlying a Series C warrant.
24. Includes 2,227 shares of common stock underlying a Series C warrant.
25. Includes 2,365 shares of common stock underlying a Series C warrant.
26. Number of shares of common stock beneficially owned and number of shares of common stock offered includes 1,223 shares of common stock underlying a Series C warrant. Number of shares beneficially owned includes 75,000 options that are vested that are vested with an exercise price of \$5.00 per share and 15,000 options that are vested with an exercise price of \$30.00 per share.
27. Includes 946 shares of common stock underlying a Series C warrant. Mr. George R. Cameron exercises voting and dispositive power over all of the shares beneficially owned by Cameron Living Trust.
28. Includes 5 shares of common stock underlying a broker warrant.
29. Includes 35 shares of common stock underlying a broker warrant. Carmelo Troccoli is a financial consultant and acquired these securities in connection with our June/July 2005 offering.
30. Includes 9,423 shares of common stock underlying a Series C warrant. William Pinamonti exercises voting and dispositive power over all of the shares beneficially owned by Centrum Bank AG.
31. Includes 4,445 shares of common stock underlying a Series C warrant.
32. Includes 22,223 shares of common stock underlying a Series C warrant. Cimarron Biomedical Equity Master Fund is an investment fund. J. H. Cullum Clark has the power to vote and dispose of PharmaFrontiers Common Stock owned by Cimarron Biomedical Equity Master Fund.
33. Includes 424 shares of common stock underlying a Series C warrant. Mary Ann Wesner exercises voting and dispositive power over all of the shares beneficially owned by Mary Ann Wesner, 2004 Roth IRA.
34. Includes 231 shares of common stock underlying a Series C warrant. Mary Ann Wesner exercises voting and dispositive power over all of the shares beneficially owned by Mary Ann Wesner, 2005 Roth IRA.
35. Includes 330 shares of common stock underlying a Series C warrant. Terry Wesner exercises voting and dispositive power over all of the shares beneficially owned by Terry Wesner, 2004 Roth IRA.
36. Includes 423 shares of common stock underlying a Series C warrant. Terry Wesner exercises voting and dispositive power over all of the shares beneficially owned by Terry Wesner, 2005 Roth IRA.
37. Includes 2,223 shares of common stock underlying a Series C warrant. CKW LLC is a private investment fund. David J Kowalick exercises voting and dispositive power over all of the shares beneficially owned by CKW LLC.

38. Includes 4,949 shares of common stock underlying a Series C warrant. Clariden Investments LTD. Is a private investment fund. Ricc-Lee Ingram exercises voting and dispositive power over all of the shares beneficially owned by Clariden Investments LTD.
39. Includes 374 shares of common stock underlying a broker warrant. Clemente Capital Management, LLC is an investment firm that acquired these securities for underwriting activities. Guy Clemente has the power to vote and dispose of Opexa Therapeutics Common Stock owned by Clemente Capital Management, LLC.
40. Includes 66,667 shares of common stock underlying a Series C warrant. Crestview Capital Master, LLC is a private investment fund. Daniel I. Warsh exercises voting and dispositive power over all of the shares beneficially owned by Crestview Capital Master, LLC.
41. Includes 4,715 shares of common stock underlying a Series C warrant. John Crutchfield exercises voting and dispositive power over all of the shares beneficially owned by Crutchfield Family 1976 Trust
42. Includes 9,894 shares of common stock underlying a Series C warrant.
43. Includes 2,370 shares of common stock underlying a Series C warrant.
44. Number of shares of common stock beneficially owned and number of shares of common stock offered includes 6,967 shares of common stock underlying a Series C warrant. Number of shares beneficially owned includes 42,000 options that are vested with an exercise price of \$30.00 and 40,000 options that are vested with an exercise price of \$5.00 per share.
45. Includes 1,778 shares of common stock underlying a Series C warrant.
46. Includes 1,334 shares of common stock underlying a Series C warrant.
47. Includes 970 shares of common stock underlying a Series C warrant.
48. Includes 16 shares of common stock underlying a Series C warrant.
49. Number of shares of common stock beneficially owned and number of shares of common stock offered includes 70,631 shares of common stock underlying a Series C warrant. Davis Investments V, LP is a private investment fund. Christopher Davis exercises voting and dispositive power over all of the shares beneficially owned by Davis Investments V, LP. Number of shares beneficially owned includes 7,500 shares of common stock underlying an April 2006 warrant.
50. Includes 771 shares of common stock underlying a Series C warrant. Andre Guay exercises voting and dispositive power over all of the shares beneficially owned by Andre Guay, IRA.
51. Includes 1,156 shares of common stock underlying a Series C warrant. Gisele Guay exercises voting and dispositive power over all of the shares beneficially owned by Gisele Guay, IRA.
52. Includes 974 shares of common stock underlying a Series C warrant. Ronald Brangwyn exercises voting and dispositive power over all of the shares beneficially owned by Ronald Brangwyn, IRA.
53. Includes 2,667 shares of common stock underlying a Series C warrant.
54. Number of shares of common stock beneficially owned and number of shares of common stock offered includes 17,780 shares of common stock underlying a Series C warrant. Laura Liang exercises voting and dispositive power over all of the shares beneficially owned by DLD Family Investments, LLC. Number of shares beneficially owned includes 110,000 shares of common stock underlying an April 2006 warrant.
55. Includes 9,580 shares of common stock underlying a Series C warrant.
56. Includes 4 shares of common stock underlying a broker warrant.

57. Includes 24 shares of common stock underlying a broker warrant.
58. Includes 21 shares of common stock underlying a broker warrant.
59. Includes 3,790 shares of common stock underlying a Series C warrant.
60. Includes 4 shares of common stock underlying a Series C warrant.
61. Includes 655 shares of common stock underlying a broker warrant.
62. Includes 1,896 shares of common stock underlying a Series C warrant.
63. Includes 2,223 shares of common stock underlying a Series C warrant. Fanny Chan exercises voting and dispositive power over all of the shares beneficially owned by E55LP.
64. Includes 944 shares of common stock underlying a Series C warrant.
65. Includes 2,667 shares of common stock underlying a Series C warrant.
66. Includes 949 shares of common stock underlying a Series C warrant. Elizabeth J. Hanson exercises voting and dispositive power over all of the shares beneficially owned by Elizabeth J. Hanson, IRA.
67. Includes 65,721 shares of common stock underlying a Series C warrant. Enable Growth Partners LP is a private investment fund. Brendan O'Neil exercises voting and dispositive power over all of the shares beneficially owned by Enable Growth Partners LP.
68. Includes 8,000 shares of common stock underlying a Series C warrant. Enable Opportunity Partners LP is a private investment fund. Brendan O'Neil exercises voting and dispositive power over all of the shares beneficially owned by Enable Opportunity Partners LP.
69. Includes 1,938 shares of common stock underlying a Series C warrant. Robert D. Ervin exercises voting and dispositive power over all of the shares beneficially owned by Ervin Living Trust.
70. Includes 2,223 shares of common stock underlying a Series C warrant. Robert D. Ervin & Rita Y. Ervin Co-TTEES exercise voting and dispositive power over all of the shares beneficially owned by Ervin Living Trust Dated 7/6/95.
71. Includes 455 shares of common stock underlying a Series C warrant. Lynn C. Kalcic exercises voting and dispositive power over all of the shares beneficially owned by First Trust Corporation TTEE FBO: Lynn C. Kalcic.
72. Includes 1,251 shares of common stock underlying a Series C warrant. Mary A. Kalcic exercises voting and dispositive power over all of the shares beneficially owned by First Trust Corporation TTEE FBO: Mary A. Kalcic.
73. Includes 3,959 shares of common stock underlying a Series C warrant.
74. Includes 5,533 shares of common stock underlying a Series C warrant.
75. Includes 1,080 shares of common stock underlying a Series C warrant.
76. Includes 9,477 shares of common stock underlying a Series C warrant. Gemini Master Fund, Ltd. is a private investment fund. Steven Winters exercises voting and dispositive power over all of the shares beneficially owned by Gemini Master Fund, Ltd.
77. Includes 56 shares of common stock underlying a broker warrant.

78. Includes 440 shares of common stock underlying a Series C warrant.
79. Includes 1,980 shares of common stock underlying a Series C warrant.
80. Includes 4 shares of common stock underlying a broker warrant.
81. Includes 4 shares of common stock underlying a broker warrant.
82. Includes 18 shares of common stock underlying a broker warrant.
83. Includes 374 shares of common stock underlying a broker warrant. Gregg Lerman is a financial consultant and acquired these securities in connection with our June/July 2005 offering.
84. Includes 9,766 shares of common stock underlying a Series C warrant.
85. Includes 2,980 shares of common stock underlying a Series C warrant. Harold E. Tellefsen exercises voting and dispositive power over all of the shares beneficially owned by Harold E. Tellefsen Trust.
86. Includes 4,000 shares of common stock underlying a Series C warrant.
87. Includes 3,425 shares of common stock underlying a Series C warrant. Mary Ann Sharrow exercises voting and dispositive power over all of the shares beneficially owned by HRBFA Custodian of the IRA FBO Mary Ann Sharrow.
88. Includes 3,235 shares of common stock underlying a Series C warrant. Paul G. Sharrow exercises voting and dispositive power over all of the shares beneficially owned by HRBFA Custodian of the IRA FBO Paul G. Sharrow.
89. Includes 4,106 shares of common stock underlying a Series C warrant.
90. Includes 4,149 shares of common stock underlying a Series C warrant. Insiders Trend Fund LP is a private investment fund. Anthony Marchese exercises voting and dispositive power over all of the shares beneficially owned by Insiders Trend Fund LP.
91. Includes 4 shares of common stock underlying a broker warrant.
92. Includes 4,445 shares of common stock underlying a Series C warrant.
93. Includes 11 shares of common stock underlying a broker warrant.
94. Includes 538 shares of common stock underlying a Series C warrant and 1,525 shares of common stock underlying a broker warrant.
95. Includes 4,914 shares of common stock underlying a Series C warrant.
96. Includes 948 shares of common stock underlying a Series C warrant. James G. Geistfeld exercises voting and dispositive power over all of the shares beneficially owned by James G. Geistfeld Living Trust.
97. Includes 21,301 shares of common stock underlying a Series C warrant. George Jarkey Jr. exercises voting and dispositive power over all of the shares beneficially owned by Jarkey Foundation.
98. Includes 14 shares of common stock underlying a broker warrant.
99. Includes 32,128 shares of common stock underlying a Series C warrant.
100. Includes 395 shares of common stock underlying a broker warrant.

101. Includes 13,334 shares of common stock underlying a Series C warrant.
102. Number of shares of common stock beneficially owned and number of shares of common stock offered includes 2,755 shares of common stock underlying a Series C warrant. Number of shares beneficially owned includes 12,500 options that are vested with an exercise price of \$30.00, 8,333 options that are vested with an exercise price of \$7.00 and 14,292 options that are vested with an exercise price of \$5.00.
103. Includes 4 shares of common stock underlying a broker warrant.
104. Includes 35 shares of common stock underlying a broker warrant.
105. Includes 9,433 shares of common stock underlying a Series C warrant.
106. Includes 187 shares of common stock underlying a broker warrant. John Parmigiani is a financial consultant and acquired these securities in connection with our June/July 2005 offering.
107. Includes 4,963 shares of common stock underlying a Series C warrant.
108. Includes 34 shares of common stock underlying a broker warrant. Jonathan Rich is a financial consultant and acquired these securities in connection with our June/July 2005 offering.
109. Includes 8,161 shares of common stock underlying a Series C warrant.
110. Includes 969 shares of common stock underlying a Series C warrant.
111. Includes 972 shares of common stock underlying a Series C warrant.
112. Includes 123 shares of common stock underlying a broker warrant. JSM Capital Holdings Corp. is a financial consultant and acquired these securities in connection with our June/July 2005 offering.
113. Includes 972 shares of common stock underlying a Series C warrant. Paul A Kalic exercises voting and dispositive power over all of the shares beneficially owned by Kalic Exemption Trust.
114. Includes 7 shares of common stock underlying a broker warrant.
115. Includes 2 shares of common stock underlying a broker warrant.
116. Includes 7,169 shares of common stock underlying a Series C warrant.
117. Includes 8,889 shares of common stock underlying a Series C warrant. Thomas Elden exercises voting and dispositive power over all of the shares beneficially owned by Lakeview Direct Investments, LP.
118. Includes 34 shares of common stock underlying a broker warrant.
119. Includes 564 shares of common stock underlying a Series C warrant.
120. Includes 2,474 shares of common stock underlying a Series C warrant. Olaf Herr exercises voting and dispositive power over all of the shares beneficially owned by LB (Swiss) Private Bank LTD.
121. Includes 2,371 shares of common stock underlying a Series C warrant.
122. Includes 947 shares of common stock underlying a Series C warrant. Gregory Mallis exercises voting and dispositive power over all of the shares beneficially owned by Liparus, LLC.
123. Includes 1,772 shares underlying a Series C warrant. Keith L. Lippert has the power to vote and dispose of the shares owned by Lippert Heilshorn & Associates, Inc.

124. Includes 4,534 shares of common stock underlying a Series C warrant. James H. Glanville exercises voting and dispositive power over all of the shares beneficially owned by Lone Star No. 1, Ltd
125. Includes 262 shares of common stock underlying a broker warrant.
126. Includes 2,424 shares of common stock underlying a Series C warrant.
127. Includes 8 shares of common stock underlying a broker warrant.
128. Includes 2,223 shares of common stock underlying a Series C warrant.
129. Includes 9,401 shares of common stock underlying a Series C warrant.
130. Includes 4,147 shares of common stock underlying a Series C warrant.
131. Includes 536 shares of common stock underlying a broker warrant.
132. Includes 4 shares of common stock underlying a broker warrant.
133. Includes 2,667 shares of common stock underlying a Series C warrant.
134. Includes 959 shares of common stock underlying a Series C warrant.
135. Includes 4,715 shares of common stock underlying a Series C warrant.
136. Includes 946 shares of common stock underlying a Series C warrant.
137. Includes 3,111 shares of common stock underlying a Series C warrant. Millard B. Ryland exercises voting and dispositive power over all of the shares beneficially owned by Millard B. Ryland IRA.
138. Includes 1,333 shares of common stock underlying a Series C warrant.
139. Includes 85 shares of common stock underlying a broker warrant. Monarch Capital Group, LLC is an investment firm that acquired these securities for underwriting activities. Anthony Marchese has the power to vote and dispose of Opexa Therapeutics common stock owned by Monarch Capital Group, LLC.
140. Includes 21 shares of common stock underlying a broker warrant.
141. Includes 1,880 shares of common stock underlying a Series C warrant.
142. Includes 2 shares of common stock underlying a broker warrant.
143. Includes 4,739 shares of common stock underlying a Series C warrant. Richard E. Crawford exercises voting and dispositive power over all of the shares beneficially owned by NFS LLC/FMTC FBO Richard E. Crawford.
144. Includes 3,198 shares of common stock underlying a Series C warrant.
145. Includes 2,223 shares of common stock underlying a Series C warrant. Norman R. Morris exercises voting and dispositive power over all of the shares beneficially owned by Norman R. Morris Living Trust.
146. Includes 18 shares of common stock underlying a broker warrant.
147. Includes 2,363 shares of common stock underlying a Series C warrant and 4 shares of common stock underlying a broker warrant.

148. Includes 22,267 shares of common stock underlying a Series C warrant. Panacea Fund, LLC is a private investment fund. Charles Polsky exercises voting and dispositive power over all of the shares beneficially owned by Panacea Fund, LLC.
149. Includes 9,448 shares of common stock underlying a Series C warrant.
150. Includes 4,667 shares of common stock underlying a Series C warrant. Parsifal Investments, L.P. is a private investment fund. Alfred L. Deaton III exercises voting and dispositive power over all of the shares beneficially owned by Parsifal Investments, L.P.
151. Includes 2,861 shares of common stock underlying a broker warrant. Patrick Linbeck is a financial consultant and acquired these securities in connection with our June/July 2005 offering.
152. Includes 948 shares of common stock underlying a Series C warrant.
153. Includes 4,701 shares of common stock underlying a Series C warrant. Paul Masters exercises voting and dispositive power over all of the shares beneficially owned by Paul Masters IRA.
154. Includes 3,759 shares of common stock underlying a Series C warrant. Kinnary Patel exercises voting and dispositive power over all of the shares beneficially owned by Kinnary Patel Rollover IRA.
155. Includes 3,759 shares of common stock underlying a Series C warrant. Kinnary Patel exercises voting and dispositive power over all of the shares beneficially owned by Kinnary Patel Roth IRA.
156. Includes 5 shares of common stock underlying a broker warrant.
157. Includes 22,223 shares of common stock underlying a Series C warrant. Pinnacle Trust Co., LTA is a private investment fund that acquired these securities for underwriting activities. Andrew Linbeck has the power to vote and dispose of PharmaFrontiers Common Stock owned by Pinnacle Trust Co., LTA.
158. Includes 18 shares of common stock underlying a broker warrant.
159. Includes 18,896 shares of common stock underlying a Series C warrant. Provident Premier Master Fund, Ltd. is a private investment fund. Steven Winters exercises voting and dispositive power over all of the shares beneficially owned by Provident Premier Master Fund, Ltd.
160. Includes 18 shares of common stock underlying a broker warrant.
161. Number of shares of common stock beneficially owned and number of shares of common stock offered includes 9,333 shares of common stock underlying a Series C warrant. Renaissance Interests, L.P. is a private investment fund. Bradley C. Karp exercises voting and dispositive power over all of the shares beneficially owned by Renaissance Interests, L.P. Number of shares beneficially owned includes 5,000 shares of common stock underlying an April 2006 warrant.
162. Includes 9,477 shares of common stock underlying a Series C warrant.
163. Includes 2,375 shares of common stock underlying a Series C warrant.
164. Includes 9,434 shares of common stock underlying a Series C warrant.
165. Includes 2 shares of common stock underlying a broker warrant.
166. Includes 4,741 shares of common stock underlying a Series C warrant.
167. Includes 2,223 shares of common stock underlying a Series C warrant.
168. Includes 974 shares of common stock underlying a Series C warrant.

169. Includes 4,445 shares of common stock underlying a Series C warrant.
170. Includes 2,227 shares of common stock underlying a Series C warrant. Paul and Mary Ann Mallis TTEES exercise voting and dispositive power over all of the shares beneficially owned by SAA Trust.
171. Includes 1,420 shares of common stock underlying a Series C warrant. Paul and Mary Ann Mallis TTEES exercise voting and dispositive power over all of the shares beneficially owned by SAA Trust Paul and Mary Ann Mallis TTEES.
172. Includes 8,792 shares of common stock underlying a broker warrant. Salient Partners is an investment firm that acquired these securities for underwriting activities. Andrew Linbeck has the power to vote and dispose of Opexa Therapeutics Common Stock owned by Salient Partners.
173. Includes 2,667 shares of common stock underlying a Series C warrant.
174. Includes 15,499 shares of common stock underlying a broker warrant. Sanders Morris Harris is an investment firm that acquired these securities for underwriting activities. Ben Morris has the power to vote and dispose of Opexa Therapeutics Common Stock owned by Sanders Morris Harris.
175. Number of shares of common stock beneficially owned and number of shares of common stock offered includes 1,333 shares of common stock underlying a Series C warrant. Number of shares beneficially owned includes 4,000 options that are vested with an exercise price of \$30.00, 3,333 options that are vested with an exercise price of \$7.00 and 6,333 options that are vested with an exercise price of \$5.00.
176. Number of shares of common stock beneficially owned and number of shares of common stock offered Includes 16,819 shares of common stock underlying warrants. Number of shares beneficially owned includes 15,000 shares of common stock underlying warrants related to a financing completed April 13, 2006. Markus Keller exercises voting and dispositive power over all of the shares beneficially owned by Schroder & Co Bank AG.
177. Number of shares of common stock offered includes 5,333 shares of common stock underlying a Series C warrant. Number of shares beneficially owned includes: (i) 31,250 shares underlying an option; (ii) 263,667 shares of common stock held by Ventures; (iii) 18,223 shares of common stock underlying a Series C warrant held by Ventures; (iv) 125,000 shares of common stock underlying the April 2006 warrant held by Ventures; (v) 5,334 shares of common stock underlying a Series C warrant; and (vi) 7,500 shares of common stock underlying an April 2006 warrant.
178. Includes 374 shares of common stock underlying a broker warrant. Scott Shapiro is a financial consultant and acquired these securities in connection with our June/July 2005 offering.
179. Includes 4,664 shares of common stock underlying a Series C warrant.
180. Includes 26,667 shares of common stock underlying a Series C warrant. SIBEX Capital Fund, Inc. is a private investment fund. Oleg S. Krasnoshchek exercises voting and dispositive power over all of the shares beneficially owned by SIBEX Capital Fund, Inc.
181. Includes 108,175 shares of common stock underlying a Series C warrant. SMI Re Limited is a private investment fund. Dr. Reginal McDaniel exercises voting and dispositive power over all of the shares beneficially owned by SMI Re Limited.
182. Number of shares of common stock beneficially owned and number of shares of common stock offered includes 10,332 shares of common stock underlying a broker warrant. Number of shares beneficially owned includes 5,390 shares of common stock underlying an April 2006 broker warrant.

183. Number of shares of common stock beneficially owned and number of shares of common stock offered includes 31,418 shares of common stock underlying a Series C warrant. Number of shares beneficially owned includes 38,500 shares of common stock underlying an April 2006 warrant.
184. Includes 970 shares of common stock underlying a Series C warrant. Frederick Stahl Jr. exercises voting and dispositive power over all of the shares beneficially owned by Stahl Family Revocable Living Trust Dated 8-23-01.
185. Includes 100 shares of common stock underlying a broker warrant. Starboard Capital Markets is an investment firm that acquired these securities for underwriting activities. Michael Hamblet has the power to vote and dispose of Opexa Therapeutics Common Stock owned by Starboard Capital Markets.
186. Includes 272 shares of common stock underlying a broker warrant.
187. Includes 1,880 shares of common stock underlying a Series C warrant. Carol A Wynn exercises voting and dispositive power over all of the shares beneficially owned by Sterling Trust Company FBO Carol A. Wynn.
188. Includes 1,762 shares of common stock underlying a Series C warrant. Harold E Tellefsen exercises voting and dispositive power over all of the shares beneficially owned by Sterling Trust Company Custodian FBO Harold E Tellefsen.
189. Includes 2,667 shares of common stock underlying a Series C warrant.
190. Includes 946 shares of common stock underlying a Series C warrant and 4 shares of common stock underlying a broker warrant. Pam Sutton exercises voting and dispositive power over all of the shares beneficially owned by P.A. P/S Trust Pam Sutton Trustee.
191. Includes 5 shares of common stock underlying a broker warrant.
192. Includes 4 shares of common stock underlying a broker warrant.
193. Includes 4,445 shares of common stock underlying a Series C warrant.
194. Includes 9,474 shares of common stock underlying a Series C warrant. TCMP3 Partners, LP is a private investment fund. Steve Slawson exercises voting and dispositive power over all of the shares beneficially owned by TCMP3 Partners, LP.
195. Number of shares of common stock beneficially owned and number of shares of common stock offered includes 9,887 shares of common stock underlying a Series C warrant. Number of shares beneficially owned includes 8,250 options that are vested.
196. Includes 4,883 shares of common stock underlying a Series C warrant.
197. Includes 4 shares of common stock underlying a broker warrant.
198. Includes 31 shares of common stock underlying a broker warrant.
199. Includes 7 shares of common stock underlying a broker warrant.
200. Includes 20 shares of common stock underlying a broker warrant.
201. Includes 2 shares of common stock underlying a broker warrant.
202. Includes 350 shares of common stock underlying a broker warrant. Thomas Suppanz is a financial consultant and acquired these securities in connection with our June/July 2005 offering.
203. Includes 463 shares of common stock underlying a broker warrant.

204. Includes 948 shares of common stock underlying a Series C warrant.
205. Includes 3,174 shares of common stock underlying a Series C warrant.
206. Includes 262 shares of common stock underlying a broker warrant.
207. Includes 18 shares of common stock underlying a broker warrant.
208. Includes 16 shares of common stock underlying a broker warrant.
209. Includes 860 shares of common stock underlying a broker warrant s. VFinance is an investment firm that acquired these securities for underwriting activities. Jonathon C. Rich has the power to vote and dispose of Opexa Therapeutics Common Stock owned by vFinance.
210. Includes 682 shares of common stock underlying a broker warrant.
211. Includes 13,334 shares of common stock underlying a Series C warrant.
212. Includes 8,667 shares of common stock underlying a Series C warrant. Yellowstone Equity Partners, Ltd. is a private investment fund. Brenda Lee exercises voting and dispositive power over all of the shares beneficially owned by Yellowstone Equity Partners, Ltd.

PLAN OF DISTRIBUTION

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- 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;
- short sales effected after the date the registration statement of which this prospectus is a part is declared effective by the SEC;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted by law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our 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 our 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 the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering. Upon any exercise of the warrants by payment of cash, however, we will receive the exercise price of the warrants.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act of 1933, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until the earlier of (1) such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with the registration statement or (2) the date on which the shares may be sold pursuant to Rule 144(k) of the Securities Act.

The anti-manipulation rules of Regulation M under the Securities Act of 1934 may apply to sales of our common stock and the activities of selling stockholders.

LEGAL MATTERS

The validity of the common stock offered by this prospectus was passed upon for us by Vinson & Elkins L.L.P., Houston, Texas.

EXPERTS

The consolidated financial statements for the years ended December 31, 2006 and December 31, 2005 and for the period from January 22, 2003 (date of inception) to December 31, 2006 included in this prospectus have been audited by Malone & Bailey PC, independent registered public accounting firm, as stated in their report appearing herein.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement we file with the Securities and Exchange Commission. This prospectus does not contain all of the information contained in the registration statement and all of the exhibits and schedules thereto. For further information about Opexa Therapeutics, Inc., please see the complete registration statement. Summaries of agreements or other documents in this prospectus are not necessarily complete. Please refer to the exhibits to the registration statement for complete copies of such documents.

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission under the Securities Exchange Act of 1934. You may read and copy the registration statement, including exhibits and schedules filed with it, at the SEC's public reference facilities at 100 F Street N.W., Washington, D.C. 20549. You may obtain information on the operation of the public reference room in Washington, D.C. by calling the Securities and Exchange Commission at 1-800-SEC-0330.

We file information electronically with the Securities and Exchange Commission. Our Securities and Exchange Commission filings also are available from the Securities and Exchange Commission's Internet site at <http://www.sec.gov>, which contains reports, proxy and information statements and other information regarding issuers that file electronically.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses, other than the underwriting discounts and commissions, payable by the registrant in connection with the sale of the securities being registered. All amounts are estimates except the Securities and Exchange Commission registration fee.

Securities and Exchange Commission Registration Fee	\$	12,769*
Printing Costs		3,000
Legal Fees and Expenses		50,000
Accounting Fees and Expenses		15,000
Transfer Agent and Registrar Fees		3,000
Miscellaneous		10,000
Total	\$	<u>93,769</u>

* Paid previously

Item 15. Indemnification of Directors and Officers.

Opexa Therapeutics, Inc. (the “Company”) has the authority under Articles 2.02a(16) and 2.02-1 of the Texas Business Corporation Act (“TBCA”) to indemnify its directors and officers to the extent provided for in such statute. The TBCA provides, in part, that a corporation may indemnify a director or officer or other person who was, is or is threatened to be made a named defendant or respondent in a proceeding because such person is or was a director, officer, employee or agent of the corporation, if it is determined that such person: (1) conducted himself in good faith; (2) reasonably believed, in the case of conduct in his official capacity as a director or officer of the corporation, that his conduct was in the corporation’s best interest and, in all other cases, that his conduct was at least not opposed to the corporation’s best interests; and (3) in the case of any criminal proceeding, had no reasonable cause to believe that his conduct was unlawful.

A corporation may indemnify a person under the TBCA against judgments, penalties, including excise and similar taxes, fines, settlement, unreasonable expenses actually incurred by the person in connection with the proceeding. If the person is found liable to the corporation or is found liable on the basis that personal benefit was improperly received by the person, the indemnification is limited to reasonable expenses actually incurred by the person in connection with the proceeding, and shall not be made in respect of any proceeding in which the person shall have been found liable for willful or intentional misconduct in the performance of his duty to the corporation. The corporation may also pay or reimburse expenses incurred by a person in connection with his appearance as a witness or other participation in a proceeding at a time when he is not a named defendant or respondent in the proceeding.

The Company’s Articles of Incorporation provide that none of its directors shall be personally liable to the Company or its shareholders for monetary damages for an act or omission in such director’s capacity as a director; provided, however, that the liability of such director is not limited to the extent that such director is found liable for (1) a breach of the director’s duty of loyalty to the Company or its shareholders, (2) an act or omission not in good faith that constitutes a breach of duty of the director to the Company or an act or omission that involves intentional misconduct or a knowing violation of the law, (3) a transaction from which the director received an improper benefit, whether or not the benefit resulted from an action taken within the scope of the director’s office, or (4) an act or omission for which the liability of the director is expressly provided by an applicable statute.

The Company believes that these provisions will assist it in attracting and retaining qualified individuals to serve as executive officers and directors. The inclusion of these provisions in the Company’s Articles of Incorporation may have the effect of reducing the likelihood of derivative litigation against the Company’s directors and may discourage or deter shareholders or management from bringing a lawsuit against directors for breach of their duty of care, even though such an action, if successful, might otherwise have benefited us or our shareholders.

The Company's Articles of Incorporation and By-laws provide that the Company may indemnify its officers, directors, agents and any other persons to the fullest extent permitted by the TBCA.

Additionally, under their employment agreements with Opexa Therapeutics Inc. Mr. McWilliams, Dr. Williams, Ms. Hohlfeld and Ms. Rill are entitled to indemnification in their capacity as officers of the Company to the fullest extent permitted by the TBCA.

Item 16. Exhibits

(a) Exhibits . The following exhibits of the Company are included herein.

- Exhibit 4.1** Form of Series C Common Stock Purchase Warrant (incorporated by reference to Exhibit 10.17 to Form SB-2 filed July 19, 2005)
- Exhibit 4.2** Securities Purchase Agreement dated June 17, 2005 by and among the Company and the Investors named therein (incorporated by reference to Exhibit 10.18 to Form SB-2 filed July 19, 2005)
- Exhibit 4.3** Registration Rights Agreement dated June 17, 2005 by and among the purchasers of common stock named therein (incorporated by reference to Exhibit 10.19 to Form SB-2 filed July 19, 2005)
- Exhibit 4.4** Securities Purchase Agreement dated June 30, 2005 by and among the Company and the purchasers of common stock named therein (incorporated by reference to Exhibit 10.20 to Form SB-2 filed July 19, 2005)
- Exhibit 4.5** Securities Purchase Agreement dated July 15, 2005 by and among the Company and the Investors named therein. (incorporated by reference to Exhibit 10.21 to Form SB-2 filed July 19, 2005)
- Exhibit 4.6** Registration Rights Agreement dated July 15, 2005 by and among the Company and the Investors named therein (incorporated by reference to Exhibit 10.22 to Form SB-2 filed July 19, 2005)
- Exhibit 4.7** Form of Warrant Agreement issued to brokers in connection with 2005 offerings(incorporated by reference to Exhibit 10.25 to Amendment No. 2 to Form SB-2 filed April 11, 2006)
- Exhibit 5.1** Opinion of Vinson & Elkins, LLP
- Exhibit 23.1 * Consent of Malone & Bailey, PC
- Exhibit 23.2 ** Consent of Vinson & Elkins L.L.P. (included in Exhibit 5.1)
- Exhibit 24.1** Power of Attorney (included on signature page of this Registration Statement)

*Filed herewith

** Previously Filed

Item 17. Undertakings.

(a) 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, represents 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 Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(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 paragraphs (1)(i), (1)(ii) and (1)(iii) do not apply if 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 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) 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

(ii) 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.

(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, 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.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement 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.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than a 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 Securities Act and will be governed by the final adjudication of such issue.

(d) The undersigned registrant hereby undertakes that:

(1) For purposes of determining liability under the Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus 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.

SIGNATURES

In accordance with the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements of filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, in the City of Houston, State of Texas, on the 19th day of December, 2007.

OPEXA THERAPEUTICS, INC.

By: /s/ David B. McWilliams

Name: David B. McWilliams
Title: Chief Executive Officer

By: /s/ Lynne Hohlfeld

Name: Lynne Hohlfeld
Title: Chief Financial Officer and
Principal Accounting Officer

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints David B. McWilliams his true and lawful attorney-in-fact and agent, with full power of substitution and revocation, for him and in his name, place and stead, in any and all capacities (until revoked in writing), to sign any and all amendments (including post-effective amendments) to this Registration Statement and to file the same with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or is substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/David B. McWilliams</u> David B. McWilliams	President, Chief Executive Officer and Director (principal executive officer)	December 19, 2007
<u>/s/Lynne Hohlfeld</u> Lynne Hohlfeld	Chief Financial Officer (principal financial and accounting officer)	December 19, 2007
<u>*</u> Gregory H. Bailey	Director	December 19, 2007
<u>*</u> David Hung	Director	December 19, 2007
<u>*</u> Lorin J. Randall	Director	December 19, 2007
<u>*</u> Michael Richman	Director	December 19, 2007
<u>*</u> Scott B. Seaman	Director	December 19, 2007

*By: /s/ David B. McWilliams
David B. McWilliams

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Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

As independent public accountants, we hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 14, 2007 except for Note 15 which is dated November 2, 2007 and except for Note 2, 4, 6 and 12 which are dated November 29, 2007, included in the Annual Report on Form 10-KSB/A of Opexa Therapeutics, Inc. for the year ended December 31, 2006 and to all references to our Firm included in this Registration Statement.

/s/ Malone & Bailey, PC

Malone & Bailey, PC
www.malone-bailey.com
Houston, Texas
December 19, 2007