ADVENTRX PHARMACEUTICALS INC
Form S-3
May 02, 2006

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As filed with the Securities and Exchange Commission on May 1, 2006
Registration Statement No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ADVENTRX Pharmaceuticals, Inc.
(Exact name of Registrant as specified in its charter)

Delaware	**84-1318182**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification Number)*

6725 Mesa Ridge Road, Suite 100
San Diego, California 92121
(Address, including zip code, and telephone number, including area code, of Registrant s principal executive offices)

Carrie E. Carlander
Chief Financial Officer
ADVENTRX Pharmaceuticals, Inc.
6725 Mesa Ridge Road, Suite 100
San Diego, California 92121
(858) 552-0866
facsimile: (858) 552-0867
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies of all communications to:

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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 only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. o

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: þ

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

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: o

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. o

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. o

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered(1)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee
Common stock, par value $0.001 per share	$100,000,000	$10,700

(1) In addition to the common stock set forth in the table, the amount to be registered includes an indeterminate number of shares issuable pursuant to stock splits and stock dividends in accordance with Securities Act Rule 416(b).

(2)

We are registering hereunder such indeterminate number of shares of common stock as shall have an aggregate initial offering price not to exceed $100,000,000. The registration fee has been calculated pursuant to Rule 457(o) under the Securities Act of 1933.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with section 8(a) of the Securities Act of 1933, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said section 8(a), may determine.

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The information in this prospectus is not complete and may be changed. No securities may be sold 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: , 2006

PROSPECTUS

$100,000,000

Common Stock

ADVENTRX Pharmaceuticals, Inc.
6725 Mesa Ridge Road, Suite 100
San Diego, California 92121
(858) 558-0866

ADVENTRX Pharmaceuticals, Inc. (the Company) is offering an aggregate of up to $100,000,000 of its common stock.

We may sell the shares covered by this prospectus from time to time in transactions on the American Stock Exchange LLC, in the over-the-counter market or in negotiated transactions. We may sell directly, or through agents or dealers designated from time to time, at fixed prices, at prevailing market prices at the time of sale, at varying prices determined at the time of sale or at negotiated prices.

Our common stock is listed on the American Stock Exchange LLC under the symbol ANX. On April 28, 2006, the last reported sale price of our common stock on the American Stock Exchange LLC was $4.88 per share.

Investing In Our Common Stock Involves Risks. See Risk Factors Beginning On Page 7.

Neither the Securities and Exchange Commission nor any state securities regulator has approved or disapproved the shares of common stock covered by this prospectus, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2006

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Important Information About This Prospectus

This prospectus is part of a shelf registration statement that we filed with the SEC. By using a shelf registration statement, we may sell our common stock, as described in this prospectus, from time to time in one or more offerings. Each time we sell our common stock, we will provide a supplement to this prospectus that contains specific information about the terms of that offering. The supplement may also add, update or change information contained in this prospectus. Before purchasing any of our common stock, you should carefully read both this prospectus and any supplement, together with the additional information incorporated into this prospectus or described under the heading Where You Can Find More Information.

You should rely only on the information contained or incorporated by reference in this prospectus and any prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We will not make an offer to sell our common stock in any jurisdiction where the offer or sale is not permitted. The information in this prospectus and any prospectus supplement is accurate as of the date on the front cover of this prospectus or any prospectus supplement, and the information in documents we file with the SEC and incorporate by reference into this prospectus or any prospectus supplement, is accurate as of the date on those documents.

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In this prospectus, ADVENTRX, the company, we, us, and our refer to ADVENTRX Pharmaceuticals, Inc.

Special Note Regarding Forward-Looking Statements

Some of the statements under Our Company, Risk Factors and elsewhere in this prospectus constitute forward-looking statements. These statements involve known and unknown risks, uncertainties, and other factors that may cause our actual results to be materially different from projected results expressed or implied by the forward-looking statements. These factors include, among others, those listed under Risk Factors and elsewhere in this prospectus.

In some cases, you can identify forward-looking statements by terms such as may, will, should, expects, plans, anticipates, believes, estimates, predicts, potential, or continue or similar terms.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Our actual results could differ materially from those expressed or implied by these forward-looking statements as a result of various factors, including the risk factors described under the heading Risk Factors and elsewhere in this prospectus. We undertake no obligation to update publicly any forward-looking statements for any reason, except as required by law, even as new information becomes available or other events occur in the future.

Where You Can Find More Information About Us

We file annual, quarterly and current reports, proxy statements and other information with the Securities and

Exchange Commission. You may read and copy any document we file with the Commission at the Public Reference Room at the Commission, 100 F Street, N.E., Washington, D.C. 20549. Please call 1-800-SEC-0330 for further information concerning the Public Reference Room. The Commission also makes these documents and other information available on its website at http://www.sec.gov. We also maintain a website at http://www.adventrx.com. The material on our website is not a part of this prospectus or any prospectus supplement.

We have filed with the Commission a registration statement under the Securities Act on Form S-3 relating to the common stock offered by this prospectus. This prospectus and any prospectus supplement constitute a part of the registration statement but do not contain all of the information set forth in the registration statement and its exhibits. For further information, we refer you to the registration statement and its exhibits.

The Commission allows us to incorporate by reference the information we file with it, which means that we can disclose certain information to you by referring you to another document we have filed with the Commission. We may furnish other information to the Commission which is not considered to be filed and is therefore not incorporated by reference into or otherwise a part of this prospectus, unless we indicate to the contrary. The information incorporated by reference is an important part of this prospectus and information that we file later with

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the Commission will automatically update this prospectus and replace any outdated information. We incorporate by reference the following:

(a) the section entitled Description of Registrant s Securities contained in the Registrant s Registration Statement on Form 8-A (file No. 001-32157) filed with the Commission on April 27, 2004;

(b) our Annual Report on Form 10-K for the fiscal year ended December 31, 2005 filed with the Commission on March 16, 2006;

(c) our Current Report on Form 8-K filed with the Commission on January 30, 2006;

(d) our Current Report on Form 8-K filed with the Commission on January 31, 2006;

(e) our Current Report on Form 8-K filed with the Commission on February 6, 2006;

(f) our Current Report on Form 8-K filed with the Commission on February 15, 2006;

(g) our Current Report on Form 8-K filed with the Commission on March 1, 2006;

(h) our Current Report on Form 8-K filed with the Commission on March 20, 2006 (Items 4.02, 8.01 and 9.01), as amended by Amendment No. 1 filed with the Commission on March 27, 2006;

(i) our Current Report on Form 8-K filed with the Commission on March 20, 2006 (Items 8.01 and 9.01);

(j) our Current Report on Form 8-K filed with the Commission on April 6, 2006;

(k) our Current Report on Form 8-K filed with the Commission on April 11, 2006 as amended by Amendment No. 1; and

(l) any future filings we make with the Commission under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement, and until we file a post-effective amendment which indicates the termination of the offering of the securities made by this prospectus.

You may request a copy of these filings, at no cost, by writing or telephoning:

Carrie E. Carlander
Chief Financial Officer
ADVENTRX Pharmaceuticals, Inc.
6725 Mesa Ridge Road, Suite 100
San Diego, California 92121
(858) 552-0866

We will provide exhibits to these filings at no cost only if they are specifically incorporated into those filings.

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Our Company

We are a biopharmaceutical research and development company focused on introducing new technologies for anticancer and antiviral treatments that improve the performance and safety of existing drugs by addressing significant problems such as drug metabolism, toxicity, bioavailability and resistance. We do not manufacture, market, sell or distribute any product. Pursuant to license agreements with University of Southern California and SD Pharmaceuticals, Inc., we have rights to drug candidates in varying stages of development. Our current drug candidates are CoFactor, ANX-530, Selone and Thiovir. All of these drug candidates are described in our Annual Report on Form 10-KSB for the fiscal year ended December 31, 2005.

On May 30, 2003, we merged our wholly-owned subsidiary, Biokeys, Inc., into the Company and changed our name from Biokeys Pharmaceuticals, Inc. to ADVENTRX Pharmaceuticals, Inc. The merger had no effect on our financial statements.

In July 2004, we formed a wholly-owned subsidiary, ADVENTRX (Europe) Ltd., in the United Kingdom for the purpose of conducting drug trials in the European Union.

We have incurred net losses since our inception. As of December 31, 2005, our accumulated deficit was approximately $59,964,840 . We expect to incur substantial and increasing losses for the next several years as we continue development and possible commercialization of new products.

To date, we have funded our operations primarily through sales of equity securities.

Our business is subject to significant risks, including risks inherent in our ongoing clinical trials, the regulatory approval processes, the results of our research and development efforts, commercialization, and competition from other pharmaceutical companies.

Recent Developments

On April 7, 2006, we entered into an Agreement and Plan of Merger (the Merger Agreement) among the Company, SD Pharmaceuticals, Inc., a Delaware corporation (SDP), Speed Acquisition, Inc., a Delaware corporation and a wholly-owned subsidiary of the Company (Merger Sub), Paul Marangos and Andrew X. Chen, each as stockholders of SDP and Paul Marangos, as an individual acting as the stockholder representative. Pursuant to the Merger Agreement, we will acquire SDP through the merger of Merger Sub into SDP and SDP will continue as the surviving corporation and as a wholly-owned subsidiary of the Company (the Merger).

Upon the closing of the transaction on April 26, 2006, ADVENTRX acquired certain U.S. and ex-U.S. intellectual property rights to eight oncology and infectious disease product candidates, including certain ex-US rights to SDP-012 (ANX-530, vinorelbine emulsion). In October 2005, ADVENTRX announced it had licensed US development and marketing rights to SDP-012 (ANX-530) from SD Pharma. Certain product candidates that ADVENTRX acquired as a result of the merger are based on a nano-emulsion technology for both soluble and insoluble parenteral drugs. The nano-emulsion technology was developed by Dr. Andrew Chen and is designed to enable the delivery of vein irritating or difficult to dissolve drugs without excipient-induced adverse effects. Many of the product candidates are based on currently approved drugs and may qualify for the 505(b)(2) regulatory process. Certain product candidates obtained in the transaction are being evaluated by ADVENTRX as possible out-licensing opportunities.

The SD Pharma product portfolio consists of five anticancer and three anti-infective therapies which are listed below:

SDP-013 A non-allergenic, non cremophor-containing emulsion formulation of paclitaxel (Taxol™) designed to eliminate the need for immunosuppressant premedication, which is recommended for paclitaxel therapy to reduce the incidence and severity of severe hypersensitivity reaction. Paclitaxel is approved to treat breast, ovarian and non-small cell lung cancers. Taxol™ worldwide sales were approximately $750 million in 2005. (Source: Bristol-Myers Squibb).

SDP-014 A novel docetaxel (Taxotere™) formulation not containing polysorbate 80 or other detergents, intended to eliminate the need for multiday immunosuppressant premedication, which is recommended for

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docetaxel therapy to reduce the incidence and severity of allergic reaction. Taxotere[tm] is approved to treat breast, non-small cell lung, prostate and gastric cancers. Worldwide Taxotere[tm] sales were approximately $1.6 billion in 2005. (Source: Sanofi-Aventis)

SDP-012 (vinorelbine emulsion) A novel emulsion formulation of vinorelbine tartrate designed to reduce vein irritation associated with the drug. Vinorelbine is approved to treat non-small cell lung cancer. According to IMS Health, worldwide sales of vinorelbine in 2005 were over $150 million.

SDP-111 A novel formulation of beta-elemene, a small molecule anticancer agent belonging to the triterpene family and currently approved in China for a variety of cancers.

SDP-112 An emulsion formulation of alpha-tocopheryl succinate, a form of vitamin E which has been shown to selectively facilitate apoptosis, or cell death, in cancer cells.

SDP-015 A proprietary intravenous formulation of an approved antibiotic in the macrolide family known as clarithromycin. Clarithromycin is approved for mild to moderate bacterial infections such as in community-acquired pneumonia. Only oral formulations of clarithromycin are currently available in the US.

SDP-011 A broad spectrum intranasal/topical anti-viral gel intended for use in cold and flu and other viral indications as an over-the-counter (OTC) product.

SDP-016 A novel formulation of vancomycin, a parenteral glycopeptide antibiotic approved to treat gram-positive bacterial infections. SDP-016 is designed to reduce the vein irritation and phlebitis associated with the IV-delivered drug.

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Risk Factors

Readers and prospective investors in our securities should carefully consider the following risk factors as well as the other information contained or incorporated by reference in this report. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties that management is not aware of or focused on or that management currently deems immaterial may also impair our business operations. This report is qualified in its entirety by these risk factors.

If any of the following risks actually occur, the Company s financial condition and results of operations could be materially and adversely affected. If this were to happen, the value of the Company s securities could decline significantly, and you could lose all or part of your investment.

We have a substantial accumulated deficit and limited working capital.

We had an accumulated deficit of $59,964,840 as of December 31, 2005. Since we presently have no source of revenues and are committed to continuing our product research and development program, significant expenditures and losses will continue until development of new products is completed and such products have been clinically tested, approved by the FDA or other regulatory agencies and successfully marketed. In addition, we fund our operations primarily through the sale of equity securities, and have had limited working capital for our product development and other activities. We do not believe that debt financing from financial institutions will be available until at least the time that one of our products is approved for commercial production.

We have no current product sales revenues or profits.

We have devoted our resources to developing a new generation of therapeutic drug products, but such products cannot be marketed until clinical testing is completed and governmental approvals have been obtained. Accordingly, there is no current source of revenues, much less profits, to sustain our present activities, and no revenues will likely be available until, and unless, the new products are clinically tested, approved by the FDA or other regulatory agencies and successfully marketed, either by us or a marketing partner, an outcome which we are not able to guarantee.

It is uncertain that we will have access to future capital.

We do not expect to generate positive cash flow from operations for at least the next several years. As a result, substantial additional equity or debt financing for research and development or clinical development will be required to fund our activities. Although we have raised equity financing in the past, including in April 2004 and July 2005, we cannot be certain that we will be able to continue to obtain such financing on favorable or satisfactory terms, if at all, or that it will be sufficient to meet our cash requirements. Any additional equity financing could result in substantial dilution to stockholders, and debt financing, if available, would likely involve restrictive covenants that preclude us from making distributions to stockholders and taking other actions beneficial to stockholders. If adequate funds are not available, we may be required to delay or reduce the scope of our drug development program or attempt to continue development by entering into arrangements with collaborative partners or others that may require us to relinquish some or all of our rights to proprietary drugs. The inability to adequately and timely fund our capital requirements would have a material adverse effect on us.

We are not certain that we will be successful in the development of our drug candidates.

The successful development of any new drug is highly uncertain and is subject to a number of significant risks. Our drug candidates, all of which are in a development stage, require significant, time-consuming and costly development, testing and regulatory clearance. This process typically takes several years and can require substantially more time. Risks include, among others, the possibility that a drug candidate will (i) be found to be ineffective or unacceptably toxic, (ii) have unacceptable side effects, (iii) fail to receive necessary regulatory clearances, (iv) not achieve broad market acceptance, (v) be subject to competition from third parties who may market equivalent or superior products, (vi) be affected by third parties holding proprietary rights that will preclude us from marketing a drug product, or (vii) not be able to be manufactured by manufacturers in a timely manner in accordance with required standards of quality. There can be no assurance that the development of our drug

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candidates will demonstrate the efficacy and safety of our drug candidates as therapeutic drugs, or, even if demonstrated, that there will be sufficient advantages to their use over other drugs or treatments so as to render the drug product commercially viable. In the past, we have been faced with limiting the scope and/or delaying the launch of preclinical and clinical drug trials due to limited cash and personnel resources. We have also chosen to terminate licenses of some drug candidates that were not showing sufficient promise to justify continued expense and development. In the event that we are not successful in developing and commercializing one or more drug candidates, investors are likely to realize a loss of their entire investment.

We have been delayed at certain times in the past in the development of our drug products by limited funding. In addition, if certain of our scientific and technical personnel resigned at or about the same time, the development of our drug products would probably be delayed until new personnel were hired and became familiar with the development programs.

Positive results in preclinical and clinical trials do not ensure that future clinical trials will be successful or that drug candidates will receive all necessary regulatory approvals for the marketing, distribution or sale of such drug candidates.

Success in preclinical and clinical trials does not ensure that large-scale clinical trials will be successful. Clinical results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals. The length of time necessary to complete clinical trials and to submit an application for marketing approval for a final decision by a regulatory authority varies significantly and may be difficult to predict. In the past, we have terminated licenses of drug candidates when our preclinical trials did not support or verify earlier preclinical data. There is a significant risk that any of our drug candidates could fail to show satisfactory results in continued trials, and would not justify further development.

We will face intense competition from other companies in the pharmaceutical industry.

We are engaged in a segment of the pharmaceutical industry that is highly competitive and rapidly changing. If successfully developed and approved, any of our drug candidates will likely compete with several existing therapies. CoFactor, our leading drug candidate, would likely compete against a well-established product, leucovorin. In addition, there are numerous companies with a focus in oncology and/or anti-viral therapeutics that are pursuing the development of pharmaceuticals that target the same diseases as are targeted by the drugs being developed by us. We anticipate that we will face intense and increasing competition in the future as new products enter the market and advanced technologies become available. We cannot assure that existing products or new products developed by competitors will not be more effective, or more effectively marketed and sold than those we may market and sell. Competitive products may render our drugs obsolete or noncompetitive prior to our recovery of development and commercialization expenses.

Many of our likely competitors such as Merck and Pfizer, will also have significantly greater financial, technical and human resources and will likely be better equipped to develop, manufacture and market products. In addition, many of these competitors have extensive experience in preclinical testing and clinical trials, obtaining FDA and other regulatory approvals and manufacturing and marketing pharmaceutical products. A number of these competitors also have products that have been approved or are in late-stage development and operate large, well-funded research and development programs. Smaller companies may also prove to be significant competitors, particularly through collaborative arrangements with large pharmaceutical and biotechnology companies. Furthermore, academic institutions, government agencies and other public and private research organizations are becoming increasingly aware of the commercial value of their inventions and are actively seeking to commercialize the technology they have developed. Companies such as Gilead, Roche and GlaxoSmithKline all have drugs in various stages of development that could become competitors. Accordingly, competitors may succeed in commercializing products more rapidly or

effectively than us, which would have a material adverse effect on us.

There is no assurance that our products will have market acceptance.

Our success will depend in substantial part on the extent to which a drug product, if eventually approved for commercial distribution, achieves market acceptance. The degree of market acceptance will depend upon a number

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of factors, including (i) the receipt and scope of regulatory approvals, (ii) the establishment and demonstration in the medical community of the safety and efficacy of a drug product, (iii) the product s potential advantages over existing treatment methods and (iv) reimbursement policies of government and third party payors. We cannot predict or guarantee that physicians, patients, healthcare insurers or maintenance organizations, or the medical community in general, will accept or utilize any of our drug products.

The unavailability of health care reimbursement for any of our products will likely adversely impact our ability to effectively market such products and whether health care reimbursement will be available for any of our products is uncertain.

Our ability to commercialize our technology successfully will depend in part on the extent to which reimbursement for the costs of such products and related treatments will be available from government health administration authorities, private health insurers and other third-party payors. Significant uncertainty exists as to the reimbursement status of newly approved medical products. We cannot guarantee that adequate third-party insurance coverage will be available for us to establish and maintain price levels sufficient for realization of an appropriate return on our investments in developing new therapies. If we are successful in getting FDA approval for CoFactor, we will be competing against a generic drug, leucovorin, which has a lower cost and a long, established history of reimbursement. Receiving sufficient reimbursement for purchase costs of CoFactor will be necessary to make it cost effective and competitive versus the established drug, leucovorin. Government, private health insurers, and other third-party payors are increasingly attempting to contain health care costs by limiting both coverage and the level of reimbursement for new therapeutic products approved for marketing by the FDA. Accordingly, even if coverage and reimbursement are provided by government, private health insurers, and third-party payors for use of our products, the market acceptance of these products would be adversely affected if the amount of reimbursement available for the use of our therapies proved to be unprofitable for health care providers.

Uncertainties related to health care reform measures may affect our success.

There have been some federal and state proposals in the past to subject the pricing of health care goods and services, including prescription drugs, to government control and to make other changes to the U.S. health care system. None of the proposals seems to have affected any of the drugs in our programs. However, it is uncertain if future legislative proposals would be adopted that might affect the drugs in our programs or what actions federal, state, or private payors for health care treatment and services may take in response to any such health care reform proposals or legislation. Any such health care reforms could have a material adverse effect on the marketability of any drugs for which we ultimately require FDA approval.

Further testing of our drug candidates will be required and there is no assurance of FDA approval.

The FDA and comparable agencies in foreign countries impose substantial requirements upon the introduction of medical products, through lengthy and detailed laboratory and clinical testing procedures, sampling activities and other costly and time-consuming procedures. Satisfaction of these requirements typically takes several years or more and varies substantially based upon the type, complexity, and novelty of the product.

The effect of government regulation and the need for FDA approval will delay marketing of new products for a considerable period of time, impose costly procedures upon our activities, and provide an advantage to larger companies that compete with us. There can be no assurance that the FDA or other regulatory approval for any products developed by us will be granted on a timely basis or at all. Any such delay in obtaining or failure to obtain, such approvals would materially and adversely affect the marketing of any contemplated products and the ability to earn product revenue. Further, regulation of manufacturing facilities by state, local, and other authorities is subject to change. Any additional regulation could result in limitations or restrictions on our ability to utilize any of our

technologies, thereby adversely affecting our operations.

Human pharmaceutical products are subject to rigorous preclinical testing and clinical trials and other approval procedures mandated by the FDA and foreign regulatory authorities. Various federal and foreign statutes and regulations also govern or influence the manufacturing, safety, labeling, storage, record keeping and marketing of pharmaceutical products. The process of obtaining these approvals and the subsequent compliance with appropriate

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U.S. and foreign statutes and regulations are time-consuming and require the expenditure of substantial resources. In addition, these requirements and processes vary widely from country to country.

Among the uncertainties and risks of the FDA approval process are the following: (i) the possibility that studies and clinical trials will fail to prove the safety and efficacy of the drug, or that any demonstrated efficacy will be so limited as to significantly reduce or altogether eliminate the acceptability of the drug in the marketplace, (ii) the possibility that the costs of development, which can far exceed the best of estimates, may render commercialization of the drug marginally profitable or altogether unprofitable, and (iii) the possibility that the amount of time required for FDA approval of a drug may extend for years beyond that which is originally estimated. In addition, the FDA or similar foreign regulatory authorities may require additional clinical trials, which could result in increased costs and significant development delays. Delays or rejections may also be encountered based upon changes in FDA policy and the establishment of additional regulations during the period of product development and FDA review. Similar delays or rejections may be encountered in other countries.

Our success will depend on licenses and proprietary rights we receive from other parties, and on any patents we may obtain.

Our success will depend in large part on our ability and our licensors ability to (i) maintain license and patent protection with respect to their drug products, (ii) defend patents and licenses once obtained, (iii) maintain trade secrets, (iv) operate without infringing upon the patents and proprietary rights of others and (iv) obtain appropriate licenses to patents or proprietary rights held by third parties if infringement would otherwise occur, both in the U.S. and in foreign countries. We have obtained licenses to patents and other proprietary rights from the University of Southern California.

The patent positions of pharmaceutical companies, including ours, are uncertain and involve complex legal and factual questions. There is no guarantee that we or our licensors have or will develop or obtain the rights to products or processes that are patentable, that patents will issue from any of the pending applications or that claims allowed will be sufficient to protect the technology licensed to us. In addition, we cannot be certain that any patents issued to or licensed by us will not be challenged, invalidated, infringed or circumvented, or that the rights granted thereunder will provide competitive disadvantages to us.

Litigation, which could result in substantial cost, may also be necessary to enforce any patents to which we have rights, or to determine the scope, validity and unenforceability of other parties proprietary rights, which may affect our rights. U.S. patents carry a presumption of validity and generally can be invalidated only through clear and convincing evidence. There can be no assurance that our licensed patents would be held valid by a court or administrative body or that an alleged infringer would be found to be infringing. The mere uncertainty resulting from the institution and continuation of any technology-related litigation or interference proceeding could have a material adverse effect on us pending resolution of the disputed matters.

We may also rely on unpatented trade secrets and know-how to maintain our competitive position, which we seek to protect, in part, by confidentiality agreements with employees, consultants and others. There can be no assurance that these agreements will not be breached or terminated, that we will have adequate remedies for any breach, or that trade secrets will not otherwise become known or be independently discovered by competitors.

Our license agreements can be terminated in the event of a breach.

The license agreements pursuant to which we license our core technologies for our potential drug products permit the licensors, to terminate the agreement under certain circumstances, such as the failure by us to use our reasonable best efforts to commercialize the subject drug or the occurrence of any other uncured material breach by us. The license

agreements also provide that the licensor is primarily responsible for obtaining patent protection for the technology licensed, and we are required to reimburse the licensor for the costs it incurs in performing these activities. The license agreements also require the payment of specified royalties. Any inability or failure to observe these terms or pay these costs or royalties could result in the termination of the applicable license agreement in certain cases. In the past, we have let lapse certain licenses for drug candidates when we determined that the expense and risk of continued development outweighed the likely benefits of that continued development. The termination of any license agreement could have a material adverse effect on us.

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Protecting our proprietary rights is difficult and costly.

The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions. Accordingly, we cannot predict the breadth of claims allowed in these companies patents or whether we may infringe or be infringing these claims. Although we have not been notified of any patent infringement, nor notified others of patent infringement, such patent disputes are common and could preclude the commercialization of our products. Patent litigation is costly in its own right and could subject us to significant liabilities to third parties. In addition, an adverse decision could force us to either obtain third-party licenses at a material cost or cease using the technology or product in dispute.

We may be unable to retain skilled personnel and maintain key relationships.

The success of our business depends, in large part, on our ability to attract and retain highly qualified management, scientific and other personnel, and on our ability to develop and maintain important relationships with leading research institutions and consultants and advisors. Competition for these types of personnel and relationships is intense from numerous pharmaceutical and biotechnology companies, universities and other research institutions. We are currently dependent upon our scientific staff, which has a deep background in our drug candidates and the ongoing preclinical and clinical trials. Recruiting and retaining senior employees with relevant drug development experience in oncology and anti-viral therapeutics is costly and time-consuming. There can be no assurance that we will be able to attract and retain such individuals on an uninterrupted basis and on commercially acceptable terms, and the failure to do so could have a material adverse effect on us by significantly delaying one or more of our drug development programs. The loss of any of our senior executive officers, including our chief executive officer and chief financial officer, in particular, could have a material adverse effect on the company and the market for our common stock, particularly if such loss was abrupt or unexpected. All of our employees are employed on an at-will basis under offer letters. We do not have non-competition agreements with any of our employees.

We currently have no sales capability, and limited marketing capability.

We currently do not have sales personnel. We have limited marketing and business development personnel. We will have to develop a sales force, or rely on marketing partners or other arrangements with third parties for the marketing, distribution and sale of any drug product which is ready for distribution. There is no guarantee that we will be able to establish marketing, distribution or sales capabilities or make arrangements with third parties to perform those activities on terms satisfactory to us, or that any internal capabilities or third party arrangements will be cost-effective.

In addition, any third parties with which we may establish marketing, distribution or sales arrangements may have significant control over important aspects of the commercialization of a drug product, including market identification, marketing methods, pricing, composition of sales force and promotional activities. There can be no assurance that we will be able to control the amount and timing of resources that any third party may devote to our products or prevent any third party from pursuing alternative technologies or products that could result in the development of products that compete with, or the withdrawal of support for, our products.

We do not have manufacturing capabilities and may not be able to efficiently develop manufacturing capabilities or contract for such services from third parties on commercially acceptable terms.

We do not have any manufacturing capacity. When and if required, we will seek to establish relationships with third-party manufacturers for the manufacture of clinical trial material and the commercial production of drug products as we have with our current manufacturing partners. There can be no assurance that we will be able to establish relationships with third-party manufacturers on commercially acceptable terms or that third-party manufacturers will be able to manufacture a drug product on a cost-effective basis in commercial quantities under

good manufacturing practices mandated by the FDA or other regulatory matters.

The dependence upon third parties for the manufacture of products may adversely affect future costs and the ability to develop and commercialize a drug product on a timely and competitive basis. Further, there can be no assurance that manufacturing or quality control problems will not arise in connection with the manufacture of our

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drug products or that third party manufacturers will be able to maintain the necessary governmental licenses and approvals to continue manufacturing such products. Any failure to establish relationships with third parties for our manufacturing requirements on commercially acceptable terms would have a material adverse effect on us.

We are dependent in part on third parties for drug development and research facilities.

We do not possess research and development facilities necessary to conduct all of our drug development activities. We engage consultants and independent contract research organizations to design and conduct clinical trials in connection with the development of our drugs. As a result, these important aspects of a drug s development will be outside our direct control. In addition, there can be no assurance that such third parties will perform all of their obligations under arrangements with us or will perform those obligations satisfactorily.

In the future, we anticipate that we will need to obtain additional or increased product liability insurance coverage and it is uncertain that such increased or additional insurance coverage can be obtained on commercially reasonable terms.

Our business will expose us to potential product liability risks that are inherent in the testing, manufacturing and marketing of pharmaceutical products. There can be no assurance that product liability claims will not be asserted against us. We intend to obtain additional limited product liability insurance for our clinical trials, directly or through our marketing development partners or contract research organization (CRO) partners, when they begin in the U.S. and to expand our insurance coverage if and when we begin marketing commercial products. However, there can be no assurance that we will be able to obtain product liability insurance on commercially acceptable terms or that we will be able to maintain such insurance at a reasonable cost or in sufficient amounts to protect against potential losses. A successful product liability claim or series of claims brought against us could have a material adverse effect on us.

The market price of our shares, like that of many biotechnology companies, is highly volatile.

Market prices for our common stock and the securities of other medical and biomedical technology companies have been highly volatile and may continue to be highly volatile in the future. Factors such as announcements of technological innovations or new products by us or our competitors, government regulatory action, litigation, patent or proprietary rights developments, and market conditions for medical and high technology stocks in general can have a significant impact on any future market for our common stock.

If we cannot satisfy AMEX s listing requirements, it may delist our common stock and we may not have an active public market for our common stock. The absence of an active trading market would likely make the common stock an illiquid investment.

Our common stock is quoted on the American Stock Exchange. To continue to be listed, we are required to maintain shareholders equity of $6,000,000 among other requirements. We do not satisfy that requirement as of December 31, 2005. The AMEX may consider delisting our common stock and suspend trading in the common stock in which case our common stock would likely trade in the over-the-counter market in the so-called pink sheets or, if available, the OTC Bulletin Board Service. As a result, an investor would likely find it significantly more difficult to dispose of, or to obtain accurate quotations as to the value of, our shares. Our ability to raise capital would most likely also be impaired due to our ineligibility to file resale registration statements under the Securities Act.

If our common stock is delisted, it may become subject to the SEC s penny stock rules and more difficult to sell.

SEC rules require brokers to provide information to purchasers of securities traded at less than $5.00 and not traded on a national securities exchange or quoted on the Nasdaq Stock Market. If our common stock becomes a penny stock

that is not exempt from these SEC rules, these disclosure requirements may have the effect of reducing trading activity in our common stock and making it more difficult for investors to sell. The rules require a broker-dealer to deliver a standardized risk disclosure document prepared by the SEC that provides information

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about penny stocks and the nature and level of risks in the penny market. The broker must also give bid and offer quotations and broker and salesperson compensation information to the customer orally or in writing before or with the confirmation. The SEC rules also require a broker to make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser s written agreement to the transaction before a transaction in a penny stock.

Changes in laws and regulations that affect the governance of public companies has increased our operating expenses and will continue to do so.

Recently enacted changes in the laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act of 2002 and the listing requirements for American Stock Exchange have imposed new duties on us and on our executives, directors, attorneys and independent accountants. In order to comply with these new rules, we have hired and expect to hire additional personnel and use additional outside legal, accounting and advisory services, which have increased and are likely to continue increasing our operating expenses. In particular, we expect to incur additional administrative expenses as we implement Section 404 of the Sarbanes-Oxley Act, which requires management to extensively evaluate and report on, and our independent registered public accounting firm to attest to, our internal controls. For example, we have incurred significant expenses, and expect to incur additional expenses, in connection with the evaluation, implementation, documentation and testing of our existing and newly implemented control systems. Management time associated with these compliance efforts necessarily reduces time available for other operating activities, which could adversely affect operating results. If we are unable to achieve full and timely compliance with these regulatory requirements, we could be required to incur additional costs, expend additional money and management time on additional remedial efforts which could adversely affect our results of operations.

Failure to implement effective control systems, or failure to complete our assessment of the effectiveness of our internal control over financial reporting, may subject us to regulatory sanctions and could result in a loss of public confidence, which could harm our operating results.

Pursuant to Section 404 of the Sarbanes-Oxley Act, beginning with our fiscal year ended December 31, 2005, we are required to include in our annual report our assessment of the effectiveness of our internal control over financial reporting. Furthermore, our independent registered public accounting firm is required to issue an opinion on whether our assessment of the effectiveness of our internal control over financial reporting is fairly stated in all material respects and separately report on whether it believes we maintained, in all material respects, effective internal control over financial reporting as of December 31, 2005.

If we fail to remedy any material weaknesses which are uncovered, fail to timely complete our assessment, or if our independent registered public accounting firm cannot timely attest to our assessment, we could be subject to regulatory sanctions and a loss of public confidence in our internal control. In addition, any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results or cause us to fail to timely meet our regulatory reporting obligations.

We have engaged in and may continue to engage in further expansion through mergers and acquisitions, which could negatively affect our business and earnings.

We have engaged in and may continue to engage in expansion through mergers and acquisitions. There are risks associated with such expansion. These risks include, among others, incorrectly assessing the asset quality of a prospective merger partner, encountering greater than anticipated costs in integrating acquired businesses, facing resistance from customers or employees, and being unable to profitably deploy assets acquired in the transaction. Additional country- and region-specific risks are associated with transactions outside the United States. To the extent we issue capital stock in connection with additional transactions, these transactions and related stock issuances may

have a dilutive effect on earnings per share and share ownership.

Our earnings, financial condition, and prospects after a merger or acquisition depend in part on our ability to successfully integrate the operations of the acquired company. We may be unable to integrate operations

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successfully or to achieve expected cost savings. Any cost savings which are realized may be offset by losses in revenues or other charges to earnings.

Description Of Capital Stock

Our authorized capital stock consists of 1,000,000 shares of Preferred Stock, $0.01 par value, and 200,000,000 shares of common stock, $0.001 par value.

Common Stock

Our common stock is quoted on the American Stock Exchange LLC under the symbol ANX.

We have never paid cash dividends on any of our securities and do not currently expect to pay any cash dividends on our securities in the foreseeable future. There are no restrictions that limit our ability to pay dividends on our common stock or that are likely to do so in the future other than restrictions under the Delaware General Corporation Law and other applicable law.

As of March 31, 2006, there were 69,128,476 shares of common stock issued and outstanding which were held of record by approximately 7,021 stockholders.

The holders of our common stock are entitled to one vote per share held of record on all matters submitted to a vote of the stockholders. Our certificate of incorporation does not provide for cumulative voting in the election of directors. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our Board of Directors out of funds legally available for that purpose. In the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of preferred stock, if any, then outstanding. Holders of our common stock have no preemptive or other subscription or conversion rights. There are no redemption or sinking fund provisions applicable to our common stock.

In the event of our voluntary or involuntary liquidation, dissolution or winding up, the owners of shares of common stock will be entitled to share equally in any assets available for distribution after the payment in full of all debts and distributions and after the owners of any of our outstanding preferred stock have received their liquidation preferences in full.

American Stock Transfer & Trust Company is our stock transfer agent and it maintains all our stockholder records. If you have questions regarding ADVENTRX stock you own, stock transfers, address or name changes, lost stock certificates, or duplicate mailings, please contact American Stock Transfer & Trust Transfer Company directly at the address below. If your shares are held with a stockbroker, please contact your broker.

American Stock Transfer & Trust Company
59 Maiden Lane, Plaza Level
New York, NY 10038
(800) 937-5449
www.amstock.com
email address - info@amstock.com

Preferred Stock

Our Board of Directors is authorized, without action by the stockholders, to issue preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges may include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of any series, all or any of which may be greater than the rights of the common stock.

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Use of Proceeds

We intend to add the net proceeds from the sale of the common stock to our general funds to be used to fund research and development and clinical trials and for general corporate purposes, which may include investment in subsidiaries, working capital, capital expenditures, repayment of short-term borrowings, refinancing of existing long-term debt, acquisitions and other business opportunities.

Plan Of Distribution

We may sell the common stock through one or more of the following ways:

directly to purchasers;

to or through one or more underwriters or dealers; or

through agents.

A prospectus supplement with respect to a particular issuance of securities will set forth the terms of the offering of those securities, including the following:

name or names of any underwriters, dealers or agents;

the purchase price of the securities and the estimated amount we will receive;

underwriting discounts and commissions; and

any initial public offering price and any discounts or concessions allowed or reallowed or paid to dealers.

If we use underwriters in the sale, the underwriters will acquire the securities for their own account and they may resell them from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Underwriting syndicates represented by one or more managing underwriters or one or more independent firms acting as underwriters may offer the securities to the public. In connection with the sale of securities, we may compensate the underwriters in the form of underwriting discounts or commissions. The purchasers of the securities for whom the underwriters may act as agent may also pay them commissions. Underwriters may sell the securities to or through dealers, and these dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agents. Unless otherwise set forth in the applicable prospectus supplement, the obligations of any underwriters to purchase the securities will be subject to conditions precedent, and the underwriters will be obligated to purchase all of the securities if any are purchased.

If we use dealers in the sale of the securities, we will sell the securities to the dealers as principals. The dealers may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. The applicable prospectus supplement will name any dealer, who may be deemed to be an underwriter, as that term is defined in the Securities Act, involved in the offer or sale of securities, and set forth any commissions or discounts we grant to the dealer.

If we use agents in the sales of the securities, the agents may solicit offers to purchase the securities from time to time. Any of these agents, who may be deemed to be an underwriter, as that term is defined in the Securities Act, involved in the offer or sale of the securities will be named, and any commissions payable by us to such agent set forth, in the applicable prospectus supplement. Any agent will be acting on a reasonable efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis.

We may also sell securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to resales. The terms of those sales would be described in the prospectus supplement.

If the prospectus supplement so indicates, we will authorize agents, underwriters or dealers to solicit offers to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to stock purchase or delayed delivery contracts providing for payment and delivery on a specified date in the future. The

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contracts will be subject only to those conditions set forth in the prospectus supplement, and the prospectus supplement will set forth the commission payable for solicitation of the contracts.

Agents, dealers and underwriters may be entitled under agreements with us to indemnification against some civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which the agents, dealers or underwriters may be required to make. Agents, dealers and underwriters or their affiliates may engage in transactions with, or perform services for, us or our subsidiaries for customary compensation.

If indicated in the applicable prospectus supplement, one or more firms may offer and sell securities in connection with a remarketing upon their purchase, in accordance with their terms, acting as principals for their own accounts or as our agents. Any remarketing firm will be identified and the terms of its agreement, if any, with us will be described in the applicable prospectus supplement. We may be obligated to indemnify the remarketing firm against some liabilities, including liabilities under the Securities Act, and the remarketing firm may engage in transactions with or perform services for us or our subsidiaries for customary compensation.

Any underwriter may engage in over-allotment, stabilizing and syndicate short covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended. Over-allotment involves sales in excess of the offering size, which creates a short position. Stabilizing transactions involve bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Syndicate short covering transactions involve purchases of securities in the open market after the distribution has been completed in order to cover syndicate short positions. Penalty bids permit the underwriters to reclaim selling concessions from dealers when the securities originally sold by the dealers are purchased in covering transactions to cover syndicate short positions. These transactions may cause the price of the securities sold in an offering to be higher than it would otherwise be. These transactions, if commenced, may be discontinued by the underwriters at any time.

The prospectus supplement relating to each offering will set forth the anticipated date of delivery of the securities.

Legal Matters

The validity of the issuance of shares of common stock we are offering under this prospectus will be passed upon for us by Bingham McCutchen LLP, San Francisco, California.

Experts

Our consolidated balance sheets as of December 31, 2005 and 2004, and the related consolidated statements of operations, stockholders equity (deficit) and cash flows for each of the years in the three-year period ended December 31, 2005, and for the period from June 12, 1996 (date of inception) through December 31, 2005, and management s assessment of the effectiveness of internal control over financial reporting and the effectiveness of our internal control over financial reporting as of December 31, 2005, have been incorporated by reference in this prospectus and in the registration statement in reliance on the reports of J.H. Cohn LLP, independent registered public accounting firm, given upon the authority of that firm as experts in accounting and auditing. The report of J.H. Cohn LLP notes that the consolidated financial statements for the period from June 12, 1996 (date of inception) through December 31, 2001, were audited by other auditors. J.H. Cohn LLP s opinion insofar as it relates to the period from June 12, 1996 to December 31, 2001, is based solely on the report of such other auditors.

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ADVENTRX Pharmaceuticals, Inc.

COMMON STOCK

PROSPECTUS

, 2006

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PART II

Information Not Required In Prospectus

Item 14. *Other Expenses Of Issuance And Distribution**

The estimated expenses in connection with the distribution of the securities being registered, all of which are to be paid by us, are as follows:

Securities and Exchange Commission Registration Fee	$ 10,700
Legal Fees and Expenses	$ 50,000
Accounting Fees and Expenses	$ 20,000
Miscellaneous Fees and Expenses	$ 9,300
Total	$ 90,000

* To be filed by amendment

Item 15. *Indemnification Of Directors And Officers*

Section 145 of the Delaware General Corporation Law grants corporations the power to indemnify their directors, officers, employees and agents in accordance with the provisions thereof. Article VI of our by-laws provide for indemnification of our directors, officers, agents and employees to the full extent permissible under Section 145 of the Delaware General Corporation Law. Section 102(b)(7) of the Delaware General Corporation Law authorizes a corporation to eliminate the liability of directors for breach of fiduciary duty in certain cases. Article VI of our certificate of incorporation eliminates such liability to the full extent permitted by Section 145.

We maintain directors and officers liability insurance coverage protecting our officers and directors against certain liabilities.

Item 16. *Exhibits*

An Exhibit Index has been attached as part of this Registration Statement and is incorporated herein by reference.

Item 17. *Undertakings*

The undersigned registrant hereby undertakes:

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

(i) to include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement; or

(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) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities

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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: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

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

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

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

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

(6) 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 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

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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.

(7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions described in Item 15 above, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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Signatures

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on a Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on May 1, 2006.

ADVENTRX Pharmaceuticals, Inc.

By: /s/ Carrie E. Carlander

Name: Carrie E. Carlander

Title: Chief Financial Officer

KNOWN ALL MEN BY THESE PRESENTS, that each person whose signature appears below does hereby constitute and appoint Evan M. Levine and Carrie E. Carlander, and each of them, with full power to act without the other, his or her true and lawful attorney-in-fact and agent for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Registration Statement including without limitation any registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises in order to effectuate the same, as fully, for all intents and purposes, as he could or might do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, may lawfully do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ M. Ross Johnson M. Ross Johnson, Ph.D.	Director, Chairman of the Board	May 1, 2006
/s/ Evan M. Levine Evan M. Levine	Director, Chief Executive Officer and President (Principal Executive Officer)	May 1, 2006
/s/ Carrie E. Carlander Carrie E. Carlander	Chief Financial Officer, Senior Vice President, Finance, Treasurer and Secretary (Principal Financial Officer)	May 1, 2006
/s/ Robert A. Daniel Robert A. Daniel	Controller (Principal Accounting Officer)	May 1, 2006
/s/ Michael M. Goldberg Michael M. Goldberg, M.D.	Director	May 1, 2006
/s/ Mark J. Pykett Mark J. Pykett, V.M.D., Ph.D.	Director	May 1, 2006

/s/ Mark Bagnall Mark Bagnall	Director	May 1, 2006
/s/ Keith Meister Keith Meister	Director	May 1, 2006

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Exhibit Index

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation(1)
3.2	Amended and Restated Bylaws of the Registrant(2)
4.1	Specimen common stock certificate for shares of Common Stock(3)
5.1	Opinion of Bingham McCutchen LLP
23.1	Consent of J. H. Cohn LLP (as to reports regarding the registrant)
23.2	Consent of J. H. Cohn LLP (as to report regarding SD Pharmaceuticals Inc.)
23.3	Consent of Bingham McCutchen LLP (included in Exhibit 5.1)
24	Power of Attorney (filed as part of signature page to Registration Statement)

(1) Incorporated by reference to exhibit 3.1 to the Registrant s Annual Report on Form 10-K for the year ended December 31, 2005.

(2) Incorporated by reference to exhibit 3.6 to the Registrant s Registration Statement on Form 10-SB, filed October 2, 2001, as amended.

(3) Incorporated by reference to same-numbered exhibit to the Registrant s Registration Statement on Form S-3 filed August 26, 2005 (File No. 333-127857).