ADEONA PHARMACEUTICALS, INC.
Form 424B5
February 02, 2011

PROSPECTUS SUPPLEMENT
(To Prospectus dated June 14, 2010)

Filed pursuant to Rule 424(b)(5)
Registration No. 333-166750

2,857,144 Shares of Common Stock

Warrants to purchase up to 1,428,572 shares of Common Stock at an exercise price of $2.00 per share

ADEONA PHARMACEUTICALS, INC.

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering to investors 2,857,144 shares of our common stock ("Shares") together with warrants to purchase up to 1,428,572 additional shares of common stock (the "Warrants"). The common stock and warrants will be sold together as a unit with a per unit purchase price of $1.40 consisting of one share of common stock and the equivalent of a warrant to purchase approximately 0.50 of a share of common stock. The exercise price of the warrants issued in the offering as part of such unit will be $2.00 and have a term of exercise equal to 13 months from the first date of exercise, which is immediately following the closing date. The shares of common stock and warrants will be issued separately but can only be purchased together in this offering.

Our common stock is traded on the NYSE AMEX LLC under the symbol "AEN." On January 27, 2011, the last reported sale price for the common stock was $1.79 per share. You are urged to obtain current market quotations of the common stock.

Investing in our securities involves a high degree of risk. Before buying any securities, you should read the discussion of material risks of investing in our common stock under the heading "Risk factors" starting on page S-10 of this prospectus supplement.

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

We have retained Chardan Capital Markets, LLC. to act as our exclusive placement agent in connection with this offering. The placement agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of securities but will use its best efforts to arrange for the sale of all of the units. We have agreed to pay the placement agent a cash fee of 6% of gross offering porceeds. See "Plan of Distribution" for more information regarding these arrangements.

	Per share(1)	Maximum Offering Amount (1)
Offering price	$ 1.40000	$ 4,000,000
Placement agent fees (maximum) (2)	$ 0.08575	$ 245,000

Proceeds, before expenses, to us (maximum) (3)	$	1.31425	$	3,755,000

(1) We estimate the total expenses of this offering, excluding placement agent fees and expenses, will be approximately $55,000.

(2) We have agreed to pay the placement agent a cash fee representing 6% of the gross purchase price paid for the units at the closing in addition to $5,000 for legal expenses. The placement agent fees shown are the fees to be paid by us to the placement agent.

(3) The proceeds shown exclude proceeds that we may receive upon exercise of the Warrants.

The date of this prospectus is January 28, 2011.

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We are offering to sell, and seeking offers to buy, shares of our common stock and warrants only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the offering of the common stock and warrants in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement must inform themselves about, and observe any restrictions relating to, the offering of the common stock and warrants and the distribution of this prospectus supplement outside the United States. This prospectus supplement does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

This prospectus supplement is not complete without, and may not be utilized except in connection with, the accompanying prospectus dated June 14, 2010 and any amendments to such prospectus. This prospectus supplement provides supplemental information regarding us and updates certain information contained in the accompanying prospectus and describes the specific terms of this offering. The accompanying prospectus gives more general information, some of which may not apply to this offering. We incorporate important information into this prospectus supplement and the accompanying prospectus by reference.

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the terms of this offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The second part is the accompanying prospectus, which gives more general information about the shares of our common stock and other securities we may offer from time to time under our shelf registration statement, some of which may not apply to the securities offered by this prospectus supplement. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or any document incorporated by reference therein, on the other hand, the information in this prospectus supplement shall control.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreement, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

You should rely only on the information contained or incorporated by reference in this prospectus supplement and contained or incorporated by reference in the accompanying prospectus. We have not authorized anyone, including the placement agent, and the placement agent has not authorized anyone, to provide you with different information. We are offering to sell, and seeking offers to buy, our securities only in jurisdictions where offers and sales are permitted. The information contained or incorporated by reference in this prospectus supplement and contained or incorporated by reference in the accompanying prospectus is accurate only as of the respective dates thereof, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus, or of any sale of our securities offered hereby. It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectus, including the documents incorporated by reference herein and therein, in making your investment decision. You should also read and consider the information in the documents we have referred you to in "Incorporation of Certain Documents by Reference" in this prospectus supplement and "Where You Can Find More Information" in the accompanying prospectus.

Unless otherwise indicated, "Adeona," the "Company," "we," "us," "our" and similar terms refer to Adeona Pharmaceutica Inc. and its subsidiaries.

This offering of common stock is being made under a registration statement on Form S-3 (Registration File no. 333-166750) that we filed with the Securities and Exchange Commission, or the SEC, as part of a "shelf" registration process and that the SEC declared effective on June 14, 2010. Under the shelf registration process, we may offer to sell shares of our common stock, $0.001 par value, and warrants to purchase shares of our common stock, and/or units consisting of two or more of any such securities from time to time in one or more offerings up to a total dollar amount of $15,000,000.

We are not making any representation to you regarding the legality of an investment in the common stock by you under applicable law. You should consult with your own advisors as to the legal, tax, business, financial and related aspect of a purchase of the common stock.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain matters in this prospectus supplement constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements, other than statements of historical facts, included in this prospectus supplement that address activities, events or developments that we expect or anticipate will or may occur in the future, including such matters as our projections, future capital expenditures, business strategy, competitive strengths, goals, expansion, market and industry developments and the growth of our businesses and operations, are forward-looking statements. These statements can be identified by introductory words such as "expects," “anticipates,” "plans," "intends," "believes," "will," "estimates," "projects" or words of similar meaning, and by the fact that they do not relate strictly to historical or current facts. Our forward-looking statements address, among other things:

a failure of our product candidates to be demonstrably safe and effective;

a failure to obtain regulatory approval for our products or to comply with ongoing regulatory requirements;

a lack of acceptance of our product candidates in the marketplace;

a failure by us to become or remain profitable;

an inability by us to obtain the capital necessary to fund our research and development activities; and

a loss of any of our key scientist or management personnel.

Additional factors that could affect future results are set forth below in this prospectus supplement under the caption Risk Factors. We caution investors that the forward-looking statements contained in this prospectus supplement must be interpreted and understood in light of conditions and circumstances that exist as of the date of this prospectus supplement. We expressly disclaim any obligation or undertaking to update or revise forward-looking statements made in this prospectus supplement to reflect any changes in management's expectations resulting from future events or changes in the conditions or circumstances upon which such expectations are based.

Each forward-looking statement should be read in context with, and in understanding of, the various other disclosures concerning our company and our business made elsewhere in this prospectus supplement and accompanying prospectus as well as our public filings with the SEC. You should not place undue reliance on any forward-looking statement as a prediction of actual results or developments. We are not obligated to update or revise any forward-looking statements contained in this prospectus supplement or any other filing to reflect new events or circumstances unless and to the extent required by applicable law.

SUMMARY

This summary highlights selected information appearing elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus and may not contain all of the information that is important to you. This prospectus supplement and the accompanying prospectus include or incorporate by reference information about the shares we are offering as well as information regarding our business and detailed financial data. You should read this prospectus supplement and the accompanying prospectus in their entirety, including the information incorporated by reference.

ABOUT ADEONA PHARMACEUTICALS, INC.

In this prospectus supplement, “Adeona Pharmaceuticals,” “Adeona” “we,” “us,” and “our” refer to Adeona Pharmaceuticals, Inc., a Nevada corporation and each of its subsidiaries, considered as a single enterprise.

Adeona Pharmaceuticals, Inc., a Nevada corporation, (“Adeona” or the “Company”) is a pharmaceutical company developing new medicines for serious central nervous systems diseases. Adeona’s primary strategy is to in-license clinical-stage drug candidates that have already demonstrated a certain level of clinical efficacy and develop them further to either commercialization or a development collaboration. Our executive offices are located at 3930 Varsity Drive, Ann Arbor, Michigan 48108. Our telephone number is (734) 332-7800, fax number is (734) 332-7878. Our website address is www.adeonapharma.com. The information on our website is not incorporated by reference into this prospectus supplement

Our strategy is to license product candidates that have demonstrated a certain level of clinical efficacy and develop them to a stage that results in a significant commercial collaboration. Currently, we have the following product candidates in development: a prescription medical food for Alzheimer’s disease, and drugs for multiple sclerosis, fibromyalgia, dry age-related macular degeneration and rheumatoid arthritis.

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Zinthionein (zinc cysteine) is a prescription medical food being developed for the dietary management of patients with Alzheimer's disease and mild cognitive impairment. A randomized, double-blind, placebo-controlled clinical study is underway at 3 centers in the United States. All 60 patients have been enrolled, and we expect completion of this clinical study by the end of March 2011.It is anticipated that top-line clinical study results should be available shortly thereafter.

- Trimesta (estriol) is a drug being developed for the treatment of relapsing-remitting multiple sclerosis in women. A randomized, double-blind, placebo-controlled clinical trial is currently underway at 15 centers in the United States. As of November 1, 2010, 115 out of 150 patients have been enrolled.

- Effirma (flupirtine) is a drug being developed for the treatment of fibromyalgia. On May 6, 2010, we entered into a sublicense agreement with Meda AB of Sweden covering all of our patents rights on the use of flupirtine for fibromyalgia.

- ZincMonoCysteine (zinc-monocysteine) is a drug being developed for the treatment of dry age-related macular degeneration. An 80 patient, randomized, double-blind, placebo-controlled clinical trial has been completed.

- dnaJP1 (hsp peptide) is a drug being developed for the treatment of rheumatoid arthritis. A 160-patient, multi-center, randomized, double-blind, placebo-controlled clinical trial has been completed.

Our secondary strategy is to advance our core competency in measuring metabolic serum zinc and copper levels. To further this effort, we purchased HartLab, LLC, on July 13, 2009. Renamed Adeona Clinical Laboratory, the wholly-owned CLIA-certified clinical testing facility provides a broad array of chemistry and microbiology diagnostic tests in the Greater Chicago area. At Adeona Clinical Laboratory, we developed and offer the CopperProof panel, a series of diagnostic tests for accurately measuring the metabolic serum zinc and copper levels of patients with Alzheimer's disease and mild cognitive impairment. Adeona Clinical Laboratory is a licensed Medicare and Medicaid provider.

Clinical Development Programs

Alzheimer’s Disease and Mild Cognitive Impairment
Zinthionein (zinc cysteine)

Our first product candidate is Zinthionein (zinc cysteine) for the dietary management of Alzheimer’s disease and mild cognitive impairment being developed as a prescription medical food. Zinthionein is a once-daily, gastroretentive, sustained-release, proprietary, oral tablet formulation of zinc and cysteine. All of Zinthionein’s constituents have Generally Regarded as Safe (GRAS) status according to FDA standards. Zinthionein was invented and developed by us to achieve the convenience of once-daily dosing, high bioavailability (the quantity or fraction of the ingested does that is absorbed) and to minimize gastrointestinal side effects of oral zinc therapy.

CopperProof-2 is a controlled, randomized, double-blind, placebo-controlled clinical study testing Zinthionein. The study is divided into two parts. Part 1 is a 13-subject, three-arm, single-dose, comparator study in Alzheimer's disease and mild cognitive impairment subjects that compared the tolerability and bioavailability of oral Zinthionein to Galzin®, the only FDA-approved zinc preparation and to placebo. Results from Part 1 of the study demonstrated a superior serum zinc bioavailability and a substantially lower incidence of adverse effects in Alzheimer's disease and mild cognitive impairment subjects in favor of Zinthionein compared to Galzin®.

Part 2 of the CopperProof 2 study, underway at 3 centers in the United States has enrolled all 60 Alzheimer's disease and mild cognitive impairment subjects and randomized them to receive either once-daily oral Zinthionein or matching placebo for six months. Subjects will be assessed at 3 and 6 months for serum parameters of zinc and copper as well as changes in cognitive function using standard clinical tests used in Alzheimer's disease and mild cognitive impairment. As of October 15, 2010, all 60 patients have been enrolled and we expect completion of this clinical study by the end of March 2011; however, no assurances can be given that such study will be completed in such time period. It is anticipated that top-line clinical study results should be available shortly thereafter.

In November 2010, we were awarded a grant in the amount of $244,480 under the Qualifying Therapeutic Discovery Project Program to support our Alzheimer’s disease program currently in clinical testing.

Relapsing-Remitting Multiple Sclerosis in Women

Trimesta (estriol)

Our second product candidate is Trimesta (estriol) for the treatment of relapsing-remitting multiple sclerosis. Estriol is a hormone that is produced by the placenta during pregnancy. Maternal levels of estriol increase in a linear fashion throughout the third trimester of pregnancy until birth, whereupon they abruptly fall to near zero. It has been scientifically documented that pregnant women with certain autoimmune diseases experience a spontaneous reduction of disease symptoms during pregnancy, especially in the third trimester. The PRIMS study (Pregnancy in Multiple Sclerosis), a landmark clinical study published in the New England Journal of Medicine , followed 254 women with multiple sclerosis during 269 pregnancies and for up to one year after delivery. The PRIMS study demonstrated that relapse rates were significantly reduced by 71 percent ($p < 0.001$) through the third trimester of pregnancy from pre-baseline levels and relapse rates then increased by 120 percent ($p < 0.001$) during the first three months after birth (post-partum) before returning to pre-pregnancy rates. Estriol has been approved and marketed for over 40 years throughout Europe and Asia for the treatment of post-menopausal hot flashes. It has never been approved by the Food and Drug Administration (FDA) for any indication.

Multiple sclerosis is a progressive neurological disease in which the body loses the ability to transmit messages along central nervous system nerve cells, leading to a loss of muscle control, paralysis, and in some cases, death. According to the National Multiple Sclerosis Society, currently, more than 2.5 million people worldwide (approximately 400,000 patients in the United States), have been diagnosed with multiple sclerosis. Mainly young adults, ages 20 to 50, and two to three times as many women than men are diagnosed with multiple scelerosis. According to the National Multiple Sclerosis Society, approximately 85% of multiple sclerosis patients are initially diagnosed with the relapsing-remitting form, compared to 10-15% with progressive forms. Despite the availability of 7 FDA-approved therapies for the treatment of relapsing-remitting multiple sclerosis, the disease is highly underserved and exacts a heavy economic toll. Multiple sclerosis costs the United States more than $9.5 billion annually in medical care and lost productivity according to the Society for Neuroscience.

An investigator-initiated, 10-patient, 22-month, single-agent, crossover clinical trial was completed in the United States to study the therapeutic effects of 8 mg of oral Trimesta taken daily in nonpregnant female relapsing remitting multiple sclerosis patients. The total volume and number of gadolinium-enhancing lesions was measured by brain magnetic resonance imaging (MRI, an established neuroimaging measurement of disease activity in multiple sclerosis) and showed a statistically significant decrease, both in lesion volumes and the number of lesions, during Trimesta treatment compared to baseline and while on drug holiday. During this clinical trial, a statistically significant14% improvement from baseline in Paced Auditory Serial Addition Test (PASAT) cognitive testing scores ($p = 0.04$) was also observed in the multiple sclerosis patients after six months of therapy. PASAT is a routine cognitive test performed in patients with a wide variety of neuropsychological disorders such as multiple sclerosis.

A randomized, double-blind, placebo-controlled clinical trial is currently underway at 15 centers in the United States. The purpose of this clinical trial is to study whether 8 mg of oral Trimesta taken daily over a 2 year period would reduce the rate of relapses in a large population of female patients with relapsing remitting multiple sclerosis. Investigators are administering either Trimesta along with glatimer acetate (Copaxone®) injections, a FDA-approved therapy for multiple sclerosis, or a placebo plus glatimer acetate injections to women between the ages of 18 to 50 who have been recently diagnosed with relapsing remitting multiple sclerosis. The primary endpoint is relapse rates at two years with a one year interim analysis using standard clinical measures of multiple sclerosis disability. As of November 1, 2010, 115 out of 150 patients have been enrolled in this clinical trial. Tentatively, we anticipate full enrollment by the second half of 2011; however, no assurances can be given that such study enrollment will be completed in such time period.

The preclinical and clinical development of Trimesta has been primarily financed by a $5 million grant from the National Multiple Sclerosis Society in partnership with the National Multiple Sclerosis Society's Southern California chapter, with support from the National Institutes of Health. In January of 2010, it was announced that an additional $860,440 in grant funding had been received through the American Recovery and Reinvestment Act allowing the number of clinical sites currently enrolling patients in the clinical study to increase from 7 clinical sites to 15.

In November 2010, we were awarded a grant in the amount of $244,480 under the Qualifying Therapeutic Discovery Project Program to support our multiple sclerosis program currently in clinical testing.

Fibromyalgia
Effirma (flurpirtine)

Our third product candidate is Effirma (flupirtine) for the treatment of fibromyalgia. Effirma is a selective neuronal potassium channel opener that also has NMDA receptor antagonist properties. Effirma is a non-opioid, non-NSAID, non-steroidal, analgesic. Preclinical data and clinical experience suggest that Effirma should also be effective for neuropathic pain since it acts in the central nervous system via a mechanism of action distinguishable from most marketed analgesics. Effirma is especially attractive because it operates through non-opiate pain pathways, exhibits no

known abuse potential, and lacks withdrawal effects. In addition, no tolerance to its antinocioceptive effects has been observed. One common link between neuroprotection, nocioception, and Effirma may be the N-methyl-D-aspartic acid glutamate system, a major receptor subtype for the excitotoxic neurotransmitter, glutamate. Effirma has strong inhibitory actions on N-methyl-D-aspartic acid-mediated neurotransmission. Flupirtine was originally developed by Asta Medica and has been approved in Europe since 1984 for the treatment of pain, although it has never beenapproved by the Food and Drug Administration for any indication.

Fibromyalgia is a chronic and debilitating condition characterized by widespread pain and stiffness throughout the body, accompanied by severe fatigue, insomnia and mood symptoms. Fibromyalgia affects an estimated 2-4% of the population worldwide, including an estimated 4 million patients in the United States. There are presently three products approved for this indication in the United States – Lyrica, Cymbalta and Savella. Flupirtine is differentiated from these products in that it employs a unique mode of action. Meda AB of Sweden estimates the United States market for fibromyalgia to be near $1 billion at the time of potential launch of flupirtine.

On May 6, 2010, we entered into a sublicense agreement with Meda AB that provides that they will assume all future development costs for the commercialization of flupirtine for fibromyalgia. As consideration for such sublicense, we received an up-front payment of $2.5 million and are entitled to milestone payments of $5 million upon filing of a New Drug Application with the United States Food and Drug Administration of flupirtine for fibromyalgia and $10 million upon marketing approval, plus royalties.

Dry Age-Related Macular Degeneration
ZincMonoCysteine (zinc-monocysteine)

Our fourth product candidate is ZincMonoCysteine (zinc-monocysteine) for the treatment of dry age-related macular degeneration. ZincMonoCysteine is an oral complex of zinc and the amino acid cysteine that we believe may have improved therapeutic properties compared to currently marketed zinc–based nutritional products. ZincMonoCysteine was invented and developed by David A. Newsome, M.D., former Chief of the Retinal Disease Section of the National Eye Institute and our Senior Vice President of Research and Development. Dr. Newsome was the first to pioneer and demonstrate the benefits of oral high dose zinc therapy in dry age-related macular degeneration. Oral high dose zinc containing nutritional products now represent the standard of care for dry age-related macular degeneration affecting over 10 million Americans and have annual sales of approximately $300 million.

ZincMonoCysteine has completed an 80-patient, randomized, double-blind, placebo-controlled clinical trial in dry age-related macular degeneration and demonstrated highly statistically significant improvements in central retinal function. These results were published in a peer-reviewed journal in 2008. Currently, we are conducting further preclinical activities on ZincMonoCysteine and planning the clinical development strategy.

Rheumatoid Arthritis
dnaJP1(hsp peptide)

Our fifth product candidate is dnaJP1 (hsp peptide) for the treatment of rheumatoid arthritis. dnaJP1 is an epitope-specific immunotherapy for rheumatoid arthritis patients. dnaJP1 is an oral 15-mer heat shock protein-derived peptide that was previously identified as a contributor of T cell-mediated inflammation in rheumatoid arthritis. Immune responses to heat shock protein are often found at sites of inflammation and have an initially amplifying effect that needs to be down regulated to prevent tissue damage. The mechanisms for this regulation involve T cells with regulatory function that are specific for heat shock protein-derived antigens. This regulatory function is one of the key components of a "molecular dimmer" whose physiologic function is to modulate inflammation independently from its trigger. This function is impaired in autoimmunity and could be restored for therapeutic purposes.

Rheumatoid arthritis is an autoimmune disease that afflicts approximately 20 million people worldwide. It is a chronic inflammatory disease that leads to pain, stiffness, swelling and limitation in the motion and function of multiple joints. If left untreated, rheumatoid arthritis can produce serious destruction of joints that frequently leads to permanent disability. Though the joints are the principal body part affected by rheumatoid arthritis, inflammation can develop in other organs as well. The disease currently affects over two million Americans, almost 1% of the population, and is two to three times more prevalent in women than men. Onset can occur at any point in life but is most frequent in the fourth and fifth decades of life, with most patients developing the disease between the ages of 35 and 50. The global market is estimated at $12 billion in annual sales and disease-modifying antirheumatic drugs, including biologics, accounted for nearly $5 billion of that figure.

In November of 2009, we announced publication of the results of an investigator-initiated, 160-patient clinical trial of dnaJP1 for the treatment of rheumatoid arthritis conducted at 11clinical centers in the United States. The publication, entitled "Epitope-Specific Immunotherapy of Rheumatoid Arthritis: Clinical Responsiveness Occurs With Immune Deviation and Relies on the Expression of a Cluster of Molecules Associated with T Cell Tolerance in a

Double-Blind, Placebo-Controlled, Pilot Phase II Trial", can be found in Arthritis & Rheumatism , Vol. 60(11), pages 3207-3216, with related editorial at page A21. The clinical trial sought to test 2 hypotheses 1) whether mucosal induction of immune tolerate to dnaJP1 would lead to a qualitative change from a proinflammatory phenotype to a more tolerogenic functional phenotype and 2) whether immune deviation of responses to an inflammatory epitope might translate into clinical improvement. One hundred sixty patients with active rheumatoid arthritis were randomized to receive oral doses of 25 mg of dnaJP1 or placebo daily for 6 months. This clinical trial was funded by a $5 million grant from the National Institutes of Health and demonstrated the following results:

1. dnaJP1 appeared to be safe and well-tolerated;
2. There was a significant reduction in the percentage of T cells producing the proinflammatory cytokine tumor necrosis factor alpha (TNF-alpha) ($p < 0.0007$);
3. The primary efficacy end point (meeting the American College of Rheumatology 20% improvement criteria at least once on day 112, 140, or 168) showed a difference between treatment groups ($p = 0.09$) that became significant in post hoc analysis using generalized estimating equations (GEE) ($p = 0.04$).
4. Differences in clinical responses were also found between treatment groups on day 140 and at followup, indicative of a durable response following discontinuation of therapy.
5. Post hoc analysis showed that the combination of dnaJP1 and the commercially available rheumatoid arthritis agent, hydroxychloroquine, was superior to the combination of hydroxychloroquine and placebo, demonstrating potential synergistic effect of dnaJP1 with hydroxychloroquine.

Currently, we are conducting further preclinical activities on dnaJP1 and planning the clinical development strategy.

Intellectual Property

Adeona's goal is to (a) obtain, maintain, and enforce patent protection for its products, formulations, processes, methods, and other proprietary technologies, (b) preserve our trade secrets, and (c) operate without infringing on the proprietary rights of other parties, worldwide. Adeona seeks, where appropriate, the broadest intellectual property protection for product candidates, proprietary information, and proprietary technology through a combination of contractual arrangements and patents.

Below is a description of our license and development agreements relating to our product candidates :

McLean Hospital Exclusive License Agreement

In 2005, as amended in 2007 and 2010, Pipex, Adeona's wholly owned subsidiary, entered into an exclusive license agreement with the McLean Hospital, a Harvard University hospital, relating to U.S. Patent No. 6,610,324 and its foreign equivalents, entitled "Flupirtine in the treatment of fibromyalgia and related conditions." Pursuant to this agreement, Pipex paid an upfront fee of $20,000 and back patent costs of approximately $41,830 and agreed to pay McLean royalties on net sales of flupirtine equal to 3.5% of net sales of flupirtine for indications covered by the issued patents, reduced to 1.75% if Pipex has a license to other intellectual property covering those indications; use Pipex's best efforts to commercialize flupirtine for the therapeutic uses embodied in the patent applications; reimburse future patent costs and pay the following milestone payments: $150,000 upon the initiation of a pivotal phase 3 clinical trial of flupirtine; $300,000 upon the filing of an New Drug Application for flupirtine; and $600,000 upon Food and Drug Administration approval of flupirtine. The due diligence requirements of the exclusive license agreement were amended in April 2010 and further amended by a Non-Disturbance Agreement that was signed with Pipex, McLean Hospital and Meda.

Effective May 6, 2010, Pipex and Adeona entered into a Sublicense Agreement (the "Agreement") with Meda AB of Sweden. Pursuant to the Agreement, Meda has been granted an exclusive sublicense to all of Pipex's patents covering the use of flupirtine for fibromyalgia. These patents have been issued in the U.S. and are pending in Canada and Japan (the "Territory"). The Agreement provides that Meda will assume all future development costs for the commercialization of flupirtine for fibromyalgia. As consideration for such sublicense, Pipex received an up-front payment of $2.5 million upon execution of the Agreement and are entitled to milestone payments of $5 million upon filing of a New Drug Application with the Food and Drug Administration for flupirtine for fibromyalgia and $10 million upon marketing approval. The Agreement also provides that Pipex is entitled to receive royalties of 7% of net sales of flupirtine approved for the treatment of fibromyalgia covered by issued patent claims in the Territory. Pursuant to the terms of Pipex's agreement with the company's university licensor, Pipex is obligated to share half of the royalties it receives with the university licensor and Pipex is obligated to pay them $375,000 upon receipt of an upfront payment.

The Regents of University of California License Agreement

In 2005, Adeona was granted an exclusive worldwide license agreement with the Regents of the University of California relating to an issued US Patent No. 6,936,599 and pending patent applications covering the uses of the drug candidate Trimesta. Pursuant to this agreement, Adeona paid an upfront license fee of $20,000, reimbursed patent expenses of $41,000 and agreed to pay a license fee of $25,000 during 2006, as well as annual maintenance fees, milestone payments totaling $750,000 that are payable on filing an New Drug Application, and on approval of an New Drug Application with the Food and Drug Administration, as well as royalties on net sales of Trimesta covered by the licensed patents. Adeona may be permitted to partially pay milestone payments in the form of equity.

Zinc MonoCysteine License Agreement

In July of 2007, Adeona entered into an exclusive worldwide license agreement with David A. Newsome, M.D., and David Tate, M.S., relating to zinc monocysteine for all uses. Pursuant to this agreement, Adeona paid an upfront license fee of $65,000 and reimbursed patent expenses of $25,000. Milestone payments totaling $1,400,000 may be due upon the achievement of certain milestones, as well as royalties of three percent (3%) on net sales for the licensed technology covered by the licensed patents. Adeona has the ability to make these milestone payments in the form of equity.

The Regents of University of California License Agreement

In July of 2008, Adeona entered into an exclusive worldwide license agreement with the Regents of the University of California relating to a series of issued US patents and pending patent applications covering novel uses of an orally active immunotherapeutic technology, dnaJP1 a candidate which has completed a 160-patient, double-blind, placebo-controlled phase II clinical trial for treatment of rheumatoid arthritis. Pursuant to this agreement, Adeona paid an upfront license fee of $25,000, reimbursed patent expenses as well as agreed to pay future patent and expenses, annual maintenance fees of $50,000 per year, milestone payments ranging from $75,000 to $5,000,000 that are payable on various clinical and regulatory milestones, as well as royalties on net sales of the licensed technology covered by the licensed patents.

THE OFFERING

Securities we are offering	2,857,144 shares of common stock Warrants to purchase up to 1,428,572 shares of common stock at an exercise price of $2.00 per share
Common stock to be outstanding after this offering	26,276,585 shares
Placement Agent Fees	At the closing, we will pay the placement agent 6% of the gross proceeds of the offering as compensation for its services in connection with this offering and an additional $5,000 of its legal expenses.
Use of proceeds	Working capital and/or general corporate purposes.
American Stock Exchange Symbol	AEN
Risk Factors	This investment involves a high degree of risk. See “Risk Factors” and other information included or incorporated into this prospectus supplement and the accompanying prospectus for a discussion of the factors you should carefully consider before deciding to invest in our securities.

The number of shares of common stock shown above to be outstanding after this offering is based on the 23,419,441 shares outstanding as of January 27, 2011 and assumes the sale of all shares. Unless otherwise indicated, the number of shares of common stock presented in this prospectus supplement excludes (i) 2,539,091 shares of our common stock that, as of the date of this prospectus supplement, are issuable upon the exercise of outstanding options under our stock plans (ii) 1,131,078 shares of our common stock that, as of the date of this prospectus supplement, are issuable upon the exercise of outstanding warrants other than those covered by this prospectus supplement and (iii) 1,428,572 shares of our common stock that may be issuable upon exercise of the warrants covered by this prospectus supplement.

Unless otherwise indicated, this prospectus supplement assumes the sale of the maximum number of common shares offered hereunder.

RISK FACTORS

Investing in our common stock involves a high degree of risk. In addition to the risks related to our business set forth in this prospectus supplement, the accompanying prospectus and the other information included and incorporated by reference in this prospectus supplement and accompanying prospectus, you should carefully consider the risks described below before purchasing our common stock. Additional risks, uncertainties and other factors not presently known to us or that we currently deem immaterial may also impair our business operations.

RISKS RELATING TO OUR BUSINESS

We currently have very minimal revenues and will need to raise additional capital to operate our business.

With the exception of the quarter ended June 30, 2010, we have experienced significant losses since inception and have a significant accumulated deficit. We expect to incur additional operating losses in the future and therefore our cumulative losses to increase. To date, other than the licensing fee we received form Meda AB for the development of and commercialization of Effirma (flupirtine) for fibromyalgia and laboratory revenues from Adeona Clinical Laboratory, we have generated very minimal revenues. As of September 30, 2010, our operating expenses totaled approximately $32.5 million on a consolidated basis. Until such time as we receive approval from the FDA and other regulatory authorities for our product candidates, we will not be permitted to sell our drugs or prescription medical food and therefore will not have product revenues. For the foreseeable future we will have to fund all of our operations and capital expenditures from equity and debt offerings, cash on hand, licensing fees, and grants. If the upfront licensing fee we recently received is not sufficient to sustain our operations, we will need to seek additional sources of financing and such additional financing may not be available on favorable terms, if at all. If we do not succeed in raising additional funds on acceptable terms, we may be unable to complete planned preclinical and clinical trials or obtain approval of our product candidates from the FDA and other regulatory authorities. In addition, we could be forced to discontinue product development, reduce or forego sales and marketing efforts, and forego attractive business opportunities. Any additional sources of financing will likely involve the issuance of our equity or debt securities, which will have a dilutive effect on our stockholders.

We have only recently achieved profitability and may never be able to sustain profitability.

Other than with respect to the quarter ended June 30, 2010, we have a history of losses and we had incurred substantial losses and negative operating cash flow. Even if we succeed in developing and commercializing one or more of our product candidates, we may still incur substantial losses for the foreseeable future and may not sustain profitability. We also expect to continue to incur significant operating and capital expenditures and anticipate that our expenses will increase substantially in the foreseeable future as we do the following:

- continue to undertake preclinical development and clinical trials for our product candidates;
- seek regulatory approvals for our product candidates;
- implement additional internal systems and infrastructure;
- lease additional or alternative office facilities; and
- hire additional personnel, including members of our management team.

We may experience negative cash flow for the foreseeable future as we fund our technology development with capital expenditures. As a result, we will need to generate significant revenues in order to achieve and maintain profitability. We may not be able to generate these revenues or achieve profitability in the future. Our failure to achieve or maintain profitability could negatively impact the value of our common stock and underlying securities.

We have a limited operating history on which investors can base an investment decision.

We have not yet demonstrated our ability to perform the functions necessary for the successful com