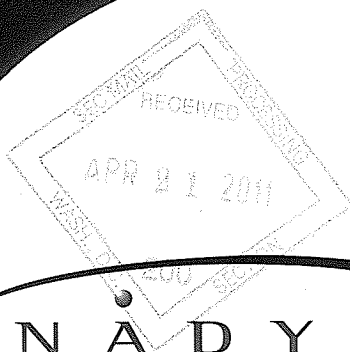




11007227



A N A D Y S

PHARMACEUTICALS, INC.

2010 ANNUAL REPORT



“In 2011 we are looking to establish ANA598 as one of the most attractive agents in the HCV landscape.”

Anadys Pharmaceuticals, Inc. is a biopharmaceutical company dedicated to improving patient care by developing novel medicines for the treatment of hepatitis C. The Company believes hepatitis C represents a large unmet medical need in which meaningful improvements in treatment outcomes may be attainable with the introduction of new medicines.

Dear Anadys Shareholders,

As I prepare my thoughts to share with you, our shareholders, I am reminded of a personal anecdote that illustrates the core principles of our business. A few months ago, I participated in Career Day at my son's middle school. After I finished my prepared remarks to the class, it was time for the question and answer session. One of my son's classmates asked me a very basic question about my career that I hadn't thought about in quite some time. She asked, "Dr. Worland, what drives you to get out of bed every morning?" I knew I didn't have to think about my answer. I told the class that ever since I was my son's age I've been passionate about challenging scientific problems and, for the last twenty plus years, I've been motivated by the desire to develop constructive solutions to improve the lives of patients with serious disease. Over the years, as I learned the business aspects of translating innovation into new treatments, I've also embraced the need to create returns for investors, without whom we couldn't succeed.

This classroom experience got me thinking about the core of Anadys' current business. I strongly believe that the foundation of our Company is rooted in this same desire and passion for scientific innovation. For the last decade, we've been dedicated to discovering and developing novel medicines aimed at addressing unmet medical needs. In more recent years, we have sharpened our focus to target the hepatitis C virus (HCV), which is one of the most common causes of chronic liver disease such as cirrhosis, liver failure and liver cancer. It's estimated that more than 170 million people worldwide are chronically infected with HCV, yet the current standard-of-care therapy is inadequate on two fronts: it results in poor response rates and is associated with significant side effects. Due to these substantial limitations, there is a robust effort ongoing to explore new agents which may improve cure rates, shorten therapy, or both. At Anadys, we believe we can leverage our passion for scientific innovation to develop novel therapies with the potential to play a significant role in future treatment paradigms.

The introduction of new medicines is critical to our work in this disease area. We have assembled an all-star team tasked with extracting maximum value out of our development programs. In 2010, our team set the stage to advance our lead asset, ANA598, into a Phase 2b clinical study for HCV, a study we believe should set the stage for Phase 3 development. ANA598 is the Company's direct-acting antiviral (DAA). DAAs, which act by diminishing the ability of HCV to multiply and further infect the liver, are being developed for use in combination regimens. We believe ANA598 has the potential to improve treatment response rates without worsening the side effect profile when added to other agents. Use of ANA598 in combination with one or more additional DAAs may further enhance clinical response and/or allow a reduction in the duration of treatment. Additionally, given that there is a scarcity of available HCV assets from distinct classes with clinical data as advanced as ANA598, we believe that ANA598 is well positioned as a candidate with which to explore such combinations. As we continue to further establish the clinical profile of ANA598 in combination with current treatment, we also anticipate opportunities to test ANA598 in combination with other DAAs, either once they are approved for marketing or while they are still under clinical exploration.

And while ANA598 garners the majority of our attention, we also understand that a varied development pipeline is important for ongoing success in HCV. Last year, we announced plans to advance ANA773, our oral immune system stimulator, into Phase 2 development for HCV. Unlike the current approved interferon products used to treat HCV, in ANA773 we're offering an oral agent with the potential for an improved side effect profile. We remain on track to initiate a Phase 2a clinical study, in which we plan to test ANA773 with ribavirin in HCV patients. While still early in development, we are excited about the potential for ANA773 to replace current interferon products, offering the prospect of an oral, immune-based therapy without interferon's treatment-limiting side effect profile.

In closing, I'd like to emphasize the inherent value of Anadys that we believe is not currently reflected in our shares. I've never been more confident in our programs, been more proud of our team or been more optimistic about our opportunities for success. These assessments reflect my, and the entire team's, passion for quality drug development and the associated savvy built up over decades of experience. We believe 2011 will be a year of defining moments for Anadys and we look forward to your continued support.



Stephen T. Worland, Ph.D.
President & Chief Executive Officer

ANADYS PHARMACEUTICALS, INC.
5871 OBERLIN DRIVE, SUITE 200
SAN DIEGO, CALIFORNIA 92121

**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
To Be Held On May 27, 2011**

Dear Stockholder:

You are cordially invited to attend the Annual Meeting of Stockholders (the Annual Meeting) of Anadys Pharmaceuticals, Inc., a Delaware corporation (the Company). The meeting will be held on Friday, May 27, 2011 at 9:00 a.m. local time at the Holiday Inn located at 9888 Mira Mesa Blvd., San Diego, California 92131 for the following purposes:

1. To elect the two Class I director nominees named herein to hold office until the 2014 Annual Meeting.
2. To ratify the selection of Ernst & Young LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2011.
3. To approve an advisory resolution regarding the compensation of the Company's named executive officers as disclosed in the Proxy Statement.
4. To conduct an advisory vote on the preferred frequency of stockholder advisory votes on the compensation of the Company's named executive officers.
5. To conduct any other business as may properly be brought before the Annual Meeting or any adjournment or postponement thereof.

These items of business are more fully described in the Proxy Statement accompanying this Notice.

The record date for the Annual Meeting is April 6, 2011. Only stockholders of record at the close of business on that date may vote at the Annual Meeting or any adjournment or postponement thereof.

By Order of the Board of Directors,

/s/ Elizabeth E. Reed

Elizabeth E. Reed
Corporate Secretary

San Diego, California
April 8, 2011

You are cordially invited to attend the Annual Meeting in person. Whether or not you expect to attend the Annual Meeting, please complete, sign, date and return the enclosed proxy card as promptly as possible in order to ensure your representation at the Annual Meeting. A return envelope (which is postage prepaid if mailed in the United States) is enclosed for your convenience. Even if you have voted by proxy, you may still vote in person if you attend the Annual Meeting. Please note, however, that if your shares are held of record by a brokerage firm, bank or other similar organization and you wish to vote at the Annual Meeting, you must obtain a proxy issued in your name from that record holder.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting to be held on May 27, 2011: The Proxy Statement and Annual Report to Stockholders are available at <http://ir.anadyspharma.com>.

[THIS PAGE INTENTIONALLY LEFT BLANK]

ANADYS PHARMACEUTICALS, INC.
5871 OBERLIN DRIVE, SUITE 200
SAN DIEGO, CA 92121

**PROXY STATEMENT
FOR THE 2011 ANNUAL MEETING OF STOCKHOLDERS
To Be Held May 27, 2011**

**QUESTIONS AND ANSWERS ABOUT THIS PROXY
MATERIAL AND VOTING**

Why am I receiving these materials?

We sent you this proxy statement and the enclosed proxy card because the Board of Directors of Anadys Pharmaceuticals, Inc. (sometimes referred to as we, the Company or Anadys) is soliciting your proxy to vote at the 2011 Annual Meeting of Stockholders (the Annual Meeting). You are invited to attend the Annual Meeting to vote on the proposals described in this proxy statement. However, you do not need to attend the meeting to vote your shares. Instead, you may simply complete, sign, date and return the enclosed proxy card.

The Company intends to mail this proxy statement and accompanying proxy card on or about April 18, 2011 to all stockholders of record entitled to vote at the Annual Meeting.

Who can vote at the Annual Meeting?

Only stockholders of record at the close of business on April 6, 2011 will be entitled to vote at the Annual Meeting. On this record date, there were 57,141,223 shares of common stock outstanding and entitled to vote. You are entitled to one vote for each share you own on any matter that may be properly presented for consideration and action by stockholders at the Annual Meeting.

Stockholder of Record: Shares Registered in Your Name

If at the close of business on April 6, 2011 your shares were registered directly in your name with Anadys' transfer agent, Computershare Trust Company, N.A., then you are a stockholder of record. As a stockholder of record, you may vote in person at the meeting or vote by proxy. Whether or not you plan to attend the Annual Meeting, we urge you to complete, sign, date and return the enclosed proxy card to ensure your vote is counted.

Beneficial Owner: Shares Registered in the Name of a Brokerage Firm or Bank

If at the close of business on April 6, 2011 your shares were held in an account at a brokerage firm, bank, dealer or other similar organization (broker), then you are the beneficial owner of shares held in "street name" and these proxy materials are being

forwarded to you by that organization. The organization holding your account is considered the stockholder of record for purposes of voting at the Annual Meeting. As a beneficial owner, you have the right to direct your broker on how to vote the shares in your account. You are also invited to attend the Annual Meeting. However, since you are not the stockholder of record, you may not vote your shares in person at the meeting unless you request and obtain a valid proxy from your broker.

What am I voting on?

There are four matters scheduled for a vote:

- *Proposal 1:* Election of two Class I directors to hold office until the 2014 Annual Meeting;
- *Proposal 2:* Ratification of the selection of Ernst & Young LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2011;
- *Proposal 3:* Approval, on an advisory basis, of a resolution regarding the compensation of the Company's named executive officers, as disclosed in this proxy statement; and
- *Proposal 4:* An advisory vote on the preferred frequency of stockholder advisory votes on the compensation of the Company's named executive officers.

How does the Board of Directors recommend that I vote?

The Board of Directors recommends that you vote:

- FOR the election of the two directors nominated by our Board of Directors and named in this Proxy Statement;
- FOR the ratification of the selection of Ernst & Young LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2011;
- FOR the approval of the advisory resolution regarding the compensation of the Company's named executive officers, as disclosed in this proxy statement; and
- FOR the frequency, on an advisory basis, of an annual advisory vote on executive compensation.

How many votes are needed to approve each proposal?

Proposal 1 — Election of directors. Directors are elected by a plurality of the votes, which means that the director nominees receiving the highest number of "FOR" votes will be elected. Neither a vote to abstain nor a broker non-vote will count as a vote cast "FOR" or "AGAINST" a director nominee, and they will have no direct effect on the outcome of the election of directors.

Proposal 2 — Ratification of independent registered public accounting firm. To be approved, this proposal must receive a “For” vote from the majority of shares present and entitled to vote either in person or by proxy. If you “Abstain” from voting, it will have the same effect as an “Against” vote. Broker non-votes will have no effect.

Proposal 3 — Advisory vote on executive compensation. This advisory proposal will be approved if a majority of shares present and entitled to vote either in person or by proxy are voted in favor of the proposal. If you “Abstain” from voting, it will have the same effect as an “Against” vote. Broker non-votes will have no effect.

Proposal 4 — Advisory vote on frequency of advisory vote on executive compensation. This advisory vote provides a choice among three frequency periods for future advisory votes on executive compensation (so-called, “say-on-pay” votes). The frequency period that receives the most votes (every one, two or three years) will be deemed to be the recommendation of the stockholders. As a result, any shares that are not voted, whether by abstention, broker non-votes or otherwise, will not affect the outcome of this proposal, except to the extent that the failure to vote for a particular frequency period may result in another frequency period receiving a larger proportion of the votes cast.

How do I vote?

Proposal 1 — You may either vote “For All”, “Withhold All”, or “For All Except” and specify the nominee(s) that you wish to withhold your vote.

Proposals 2 and 3 — You may vote “For” or “Against” or abstain from voting.

Proposal 4 — You may vote for “1 Year,” “2 Years,” “3 Years” or “Abstain.”

The procedures for voting are explained below:

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record, you may vote in person at the Annual Meeting or vote by proxy using the enclosed proxy card. Whether or not you plan to attend the Annual Meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the Annual Meeting and vote in person if you have already voted by proxy. Your vote will only be counted once however.

- To vote in person, come to the Annual Meeting and we will give you a ballot when you arrive. Even if you plan to attend the Annual Meeting, we urge you to vote by proxy prior to the Annual Meeting to ensure your vote is counted.
- To vote using the proxy card, simply complete, sign and date the enclosed proxy card and return it promptly in the envelope provided. If your signed proxy card is received by us before the Annual Meeting, we will vote your shares as you direct.

Beneficial Owner: Shares Registered in the Name of Brokerage Firm or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank or other agent, you should have received a proxy card and voting instructions with these proxy materials from that organization rather than from Anadys. Simply follow the voting instructions to ensure that your vote is counted. To vote in person at the Annual Meeting, you must obtain a valid proxy from your broker, bank or other agent. Follow the instructions from your broker, bank or other agent included with these proxy materials, or contact your broker, bank or other agent to request a proxy form.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you own as of the close of business on April 6, 2011.

What if I return a proxy card but do not make specific choices?

If you return a signed and dated proxy card without marking any voting selections, your shares will be voted as follows:

- “For” the election of each of the two nominees for director;
- “For” the ratification of the selection of Ernst & Young LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2011;
- “For,” the approval of the advisory resolution regarding the compensation of the Company’s named executive officers; and
- “For,” “1 Year” on the frequency at which the Company should submit a “say on pay” proposal to its stockholders.

If any other matter is properly presented at the Annual Meeting, your proxyholder (one of the individuals named on your proxy card) will vote your shares using his or her best judgment.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. In addition to these mailed proxy materials, our directors and employees may also solicit proxies in person, by telephone or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. We may also reimburse brokers for the cost of forwarding proxy materials to beneficial owners.

What does it mean if I receive more than one proxy card?

If you receive more than one proxy card, your shares are registered in more than one name or are registered in different accounts. Please complete, sign, date and return each proxy card to ensure that all of your shares are voted.

Can I change my vote after submitting my proxy?

Yes. You can revoke your proxy at any time before the final vote at the Annual Meeting. If you are the record holder of your shares, you may revoke your proxy in any one of three ways:

- You may submit another properly completed proxy card with a later date.
- You may send a timely written notice that you are revoking your proxy to Anadys' Corporate Secretary at 5871 Oberlin Drive, Suite 200, San Diego, California, 92121.
- You may attend the Annual Meeting and vote in person. Simply attending the Annual Meeting will not, by itself, revoke your proxy.

If your shares are held by your broker, bank or other agent you should follow the instructions provided by your broker.

When are stockholder proposals due for next year's Annual Meeting?

To be considered for inclusion in next year's proxy materials, your proposal must be submitted in writing by December 9, 2011 to Anadys' Corporate Secretary at 5871 Oberlin Drive, Suite 200, San Diego, California 92121. If you wish to submit a proposal that is not to be included in next year's proxy materials or nominate a director, you must do so no earlier than the close of business on January 28, 2012 and no later than the close of business on February 27, 2012 unless the date of the 2012 Annual Meeting is advanced more than thirty days prior to or delayed by more than thirty days after May 27, 2012, the anniversary of this year's Annual Meeting, in which case notice must be delivered not earlier than the close of business on the 120th day prior to next year's Annual Meeting and not later than the close of business on the later of the 90th day prior to next year's Annual Meeting or the 10th day following the day on which Anadys first publicly announces the date of next year's Annual Meeting. You are also advised to review the Company's Bylaws, which you may request in writing from the Company's Secretary at the address above and which contain additional requirements about advance notice of stockholder proposals and director nominations.

How are votes counted?

Votes will be counted by the inspector of elections appointed for the Annual Meeting, who will separately count "For" and "Withhold" votes with respect to Proposal 1, "For," "Against" and "Abstain" votes with respect to Proposals 2 and 3 and "1 Year," "2 Years," "3 Years" and "Abstain" with respect to Proposal 4. Abstentions and broker non-votes will be treated as shares present for the purpose of determining the presence of a quorum for the transaction of business at the annual meeting. Abstentions will have the same effect as "Against" votes for Proposals 2 and 3, but will have no effect on the outcome of Proposals 1 or 4. Broker non-votes will have no effect on the outcome of any Proposal.

What are “broker non-votes”?

Broker non-votes occur when a beneficial owner of shares held in “street name” does not give instructions to the broker or nominee holding the shares as to how to vote on matters deemed “non-routine.” Generally, if shares are held in street name, the beneficial owner of the shares is entitled to give voting instructions to the broker or nominee holding the shares. If the beneficial owner does not provide voting instructions, the broker or nominee can still vote the shares with respect to matters that are considered to be “routine,” but not with respect to “non-routine” matters. Under the rules and interpretations of the New York Stock Exchange (“NYSE”), which may govern brokers or nominees holding shares of Anadys stock, “non-routine” matters are matters that may substantially affect the rights or privileges of stockholders, such as mergers, stockholder proposals and elections of directors (even if not contested) and, for the first time, under a new amendment to the NYSE rules, executive compensation, including the advisory stockholder votes on executive compensation and on the frequency of stockholder votes on executive compensation.

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid Annual Meeting. A quorum will be present if at least a majority of the outstanding shares are represented by stockholders present at the Annual Meeting or by proxy. On the record date, there were 57,141,223 shares outstanding and entitled to vote. Thus 28,570,612 shares must be represented by stockholders present at the Annual Meeting or by proxy to have a quorum.

Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker) or you vote in person at the Annual Meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, either the chairman of the Annual Meeting or a majority of the votes present at the Annual Meeting may adjourn the meeting to another date.

How can I find out the results of the voting at the Annual Meeting?

Voting results will be included in a Form 8-K following the conclusion of the Annual Meeting, which we expect to file with the Securities and Exchange Commission on or before June 3, 2011.

What proxy materials are available on the internet?

This proxy statement and our annual report to stockholders are available at <http://ir.anadyspharma.com>.

**PROPOSAL 1
ELECTION OF DIRECTORS**

Our Certificate of Incorporation and Bylaws provide that the Board of Directors shall be divided into three classes, each class consisting, as nearly as possible, of one

third of the total number of directors, with each class having a three-year term. Vacancies on the Board of Directors may be filled only by persons elected by a majority of the remaining directors. A director elected by the Board of Directors to fill a vacancy (including a vacancy created by an increase in the number of directors) shall serve for the remainder of the full term of the class of directors in which the vacancy occurred and until such director's successor is elected and qualified, or until such director's death, resignation or removal.

Our Board of Directors is presently composed of seven members. The Board of Directors has determined that Drs. Papadopoulos and Xanthopoulos and Messrs. Foletta, Fotiadis and Labinger, which members constitute a majority of the Board of Directors, are independent (as independence is currently defined by the listing standards of the Nasdaq Stock Market (Nasdaq)). In making its determination, the Board of Directors considered any transactions, relationships and arrangements with each of Drs. Papadopoulos and Xanthopoulos and Messrs. Foletta, Fotiadis and Labinger, and concluded that none of them has any relationships with us that would impair his independence under applicable Nasdaq listing standards and rules of the Securities and Exchange Commission (SEC).

Directors are elected by a plurality of the votes present in person or represented by proxy and entitled to vote at the Annual Meeting. Shares represented by executed proxies will be voted, if authority to do so is not withheld, for the election of the two nominees named below. In the event that any nominee should be unavailable for election as a result of an unexpected occurrence, such shares will be voted for the election of such substitute nominee as the Corporate Governance and Nominating Committee of the Board of Directors may propose. Each person nominated for election has agreed to serve if elected, and the Company has no reason to believe that either nominee will be unable to serve.

There are two directors in Class I, the class whose term of office expires in 2011, of which both have been nominated for re-election, Mr. Foletta and Dr. Xanthopoulos. Proxies may only be selected for the number of nominees named below and may not be voted for a greater number of persons. The nominees for election to this class are currently directors of the Company and were previously elected by the stockholders. If elected at the Annual Meeting, each nominee would serve until the 2014 Annual Meeting of Stockholders and until his successor is elected and qualified, or until such director's death, resignation or removal.

For each person nominated and each person whose term of office as a director will continue after the Annual Meeting, set forth below is biographical information and a description of the particular experience, qualifications, attributes or skills that led the Board to conclude that each person should serve as a director for the Company as of the date of this filing.

Class I Nominees for Election for a Three-Year Term Expiring at the 2014 Annual Meeting of Stockholders

Mark G. Foletta, CPA, age 50, joined our Board of Directors in September 2005. Mr. Foletta has served as Senior Vice President, Finance and Chief Financial Officer at Amylin Pharmaceuticals Inc., a biopharmaceutical company, since March 2006. He had previously served as Vice President, Finance and Chief Financial Officer at Amylin since March 2000. He served as a Principal of Triton Group Management, Inc., a management consulting firm, from 1997 to 2000. From 1986 to 1997, Mr. Foletta held a number of management positions with Intermark, Inc. and Triton Group, Ltd., each a diversified holding company, the most recent of which was Senior Vice President, Chief Financial Officer and Corporate Secretary. From 1982 to 1986, Mr. Foletta was with Ernst & Young, a public accounting firm, most recently serving as an Audit Manager. Mr. Foletta earned his B.A. in Business Economics from the University of California, Santa Barbara. Mr. Foletta is a certified public accountant. Based on Mr. Foletta's senior management experience in the biopharmaceutical industry, particularly as the Chief Financial Officer of Amylin Pharmaceuticals, Inc., and his financial and accounting expertise, the Board believes Mr. Foletta has the appropriate set of skills to serve on our Board.

Kleanthis G. Xanthopoulos, Ph.D., age 52, has served as a member of our Board of Directors since May 2000 and served as our President and Chief Executive Officer from May 2000 to November 2006. Since December 2007, Dr. Xanthopoulos has served as President and Chief Executive Officer of Regulus Therapeutics Inc., a biopharmaceutical company. From January 2007 to December 2007, Dr. Xanthopoulos was a Managing Director of Enterprise Partners Venture Capital, a venture capital firm. From 1997 to 2000, he held a variety of positions at Aurora Biosciences Corporation, a biotechnology company, including Vice President, Genomics & Molecular Biology. Dr. Xanthopoulos was a Section Head of the National Human Genome Research Institute at The National Institutes of Health. He was a Postdoctoral Research Fellow at the Rockefeller University from 1987 to 1990 and an Associate Professor of Molecular Biology at the Karolinska Nobel Medical Institute, Sweden from 1991 to 1995. Dr. Xanthopoulos is also a member of the Board of Directors of Odyssey Thera, Inc., a privately held drug discovery company, Regulus Therapeutics and BIOCUM, Southern California's life science industry association, where he chairs the Capital Formation Committee. An Onassis Scholar, Dr. Xanthopoulos received his B.Sc. in Biology with honors from Aristotle University of Thessaloniki, Greece, and received both his M.Sc. in Microbiology and Ph.D. in Molecular Biology from the University of Stockholm, Sweden. Based on Dr. Xanthopoulos' experience in the biopharmaceutical industry, his management and business development expertise, his scientific background and his perspective on Anadys' business and programs as a founder and former Chief Executive Officer of Anadys, the Board believes Dr. Xanthopoulos has the appropriate set of skills to serve on our Board.

The Board of Directors Recommends a Vote FOR the election of each of the Nominees.

Class II Directors Continuing in Office Until the 2012 Annual Meeting of Stockholders

Marios Fotiadis, age 37, has served as a member of our Board of Directors since September 2002. Since November 2007, Mr. Fotiadis has been the Managing Director of TVM Capital MENA, a private equity firm focused on health care and life science investments. Previously, he was Managing Director of life sciences investments at Enterprise Partners Venture Capital, a venture capital firm, and before that, a Partner at Advent International, a private equity firm. Prior to joining Advent, he was with SG Capital Partners, a private equity firm, from 1999 to 2004 and oversaw its portfolio in life sciences. Prior to 1999, Mr. Fotiadis was an investment banker focusing on mergers and acquisitions transactions with SG Cowen, an investment bank related to SG Capital Partners. Mr. Fotiadis holds an M.B.A. from Columbia University and a B.S.B.A. degree cum laude in Business Administration from the Daniels College of Business at the University of Denver. Based on Mr. Fotiadis' experience in the investment banking, private equity and venture capital communities and his perspective as a portfolio company advisor for biopharmaceutical companies, with expertise in the evaluation of assets and opportunities, the Board believes Mr. Fotiadis has the appropriate set of skills to serve on our Board.

Steve Worland, Ph.D., age 53, was appointed President and Chief Executive Officer and a member of our Board of Directors in August 2007. Dr. Worland joined us as our Chief Scientific Officer in 2001 and was promoted to Executive Vice President, Head of Research and Development in October 2004. In December 2005 he was named Executive Vice President, Pharmaceuticals, assuming additional responsibilities, including strategic planning and corporate development, while continuing to lead our research and development efforts. In June 2006 he was named President, Pharmaceuticals. From 1999 to 2001 he was Vice President, Head of Antiviral Research, at Agouron Pharmaceuticals, a Pfizer Company. Dr. Worland was at Agouron from 1988 through the acquisition of Agouron by Warner-Lambert in 1999. Dr. Worland was a National Institutes of Health Postdoctoral Fellow in Molecular Biology at Harvard University from 1985 to 1988. He received his B.S. with highest honors in Biological Chemistry from the University of Michigan and his Ph.D. in Chemistry from the University of California, Berkeley. Based on Dr. Worland's senior management experience in the biopharmaceutical industry, his scientific background and his knowledge of and perspective on the Company, having served in a number of different officer capacities at Anadys since 2001, the Board believes Dr. Worland has the appropriate set of skills to serve on our Board.

Class III Directors Continuing in Office Until the 2013 Annual Meeting of Stockholders

James L. Freddo, M.D., 56, was appointed a member of the Board of Directors in January 2011 and has served as Senior Vice President, Drug Development and Chief Medical Officer since July 2008. Prior to joining Anadys in July 2006, Dr. Freddo was Vice President, Clinical Site Head and Development Site Head, Pfizer Global Research and Development, La Jolla. Previously at Pfizer, he was Executive Director,

Site Therapeutic Area Leader, Clinical Development, Oncology. While at Pfizer, Dr. Freddo led the team responsible for the registration of Sutent® (sunitinib malate), a drug approved by the United States Food and Drug Administration (FDA) in January 2006 for treating advanced kidney cancer and gastrointestinal stromal tumors. Prior to Pfizer, Dr. Freddo held a variety of senior management positions at Wyeth-Ayerst Research from December 1996 until June 2002, including Senior Director, Oncology, Senior Director, Infectious Diseases, and Senior Director, Transplantation Immunology. Dr. Freddo currently serves as a member of the Board of Directors of InfuSystem Holdings, Inc., a healthcare services company. He holds a B.S. degree in Medical Technology from the State University of New York at Stony Brook, and a M.D. degree from the University of North Carolina, where he also completed his fellowship training. Based on Dr. Freddo's experience in the biopharmaceutical industry, including his current role as Anadys' Chief Medical Officer and his prior positions at Pfizer, his clinical development expertise and his medical background as a treating physician, the Board believes Dr. Freddo has the appropriate set of skills to serve on our Board.

Barry A. Labinger, age 47, was appointed to our Board of Directors in March 2011. Mr. Labinger has served as Executive Vice President and Chief Commercial Officer of Human Genome Sciences, a pharmaceutical company, since August of 2005. He has also served as Chief Financial Officer of Human Genome Sciences and served in that capacity from December of 2005 until July of 2006. From 2002 to 2005, he led the global pharmaceutical business at 3M Company as Division Vice President. From 2000 to 2002 at Immunex Corporation, Mr. Labinger was Senior Vice President and General Manager, Commercial Operations and Vice President of Marketing. He held commercial leadership positions at Bristol-Myers Squibb from 1997 to 2000, including Senior Director, Diabetes Marketing. From 1990 to 1997, he served in various sales and marketing positions at Abbott Laboratories. Mr. Labinger holds a Masters of Business Administration from the Kellogg Graduate School of Management at Northwestern University. Based on Mr. Labinger's senior management experience in the biopharmaceutical industry, including his current position as the Chief Commercial Officer of Human Genome Sciences, and his broad experience with the commercialization of drugs and his resulting perspective on product planning, the Board believes Mr. Labinger has the appropriate set of skills to serve on our Board.

Stelios Papadopoulos, Ph.D., age 62, has served as a member of our Board of Directors since May 2000. Dr. Papadopoulos' career in biotech spans more than two decades. In August 2006 he retired as Vice Chairman of Cowen & Co., LLC, a global brokerage and investment banking firm, where he had been an investment banker focusing on the biotechnology and pharmaceutical sectors since 2000. Dr. Papadopoulos was an investment banker at PaineWebber Incorporated, a global brokerage and investment banking firm, from 1987 to 2000, most recently serving as Chairman of Paine Webber Development Corp, a PaineWebber subsidiary focusing on biotechnology. Prior to joining PaineWebber, he was a Vice President in the Equity Research Department of Drexel Burnham Lambert, an investment banking firm, covering the biotechnology industry and prior to that a biotechnology analyst at

Donaldson, Lufkin & Jenrette, an investment banking firm. Before coming to Wall Street, Dr. Papadopoulos was on the faculty of the Department of Cell Biology at New York University Medical Center. He continues his affiliation with New York University Medical Center as an Adjunct Associate Professor of Cell Biology. Dr. Papadopoulos holds a Ph.D. in biophysics and an M.B.A. in finance, both from New York University. He is co-founder and Chairman of the Board of Exelixis, Inc., a drug discovery and development company, co-founder and member of the Board of Cellzome Inc., a privately held drug discovery company, a member of the Board of Directors of Biogen Idec, Inc., a biopharmaceutical company, a member of the Board of Directors of Regulus Therapeutics, Inc., a privately held biotechnology company, a member of the Board of Directors of Joule Unlimited, a privately held biotechnology company, as well as vice-chairman of the Board of Directors of BG Medicine, Inc, a biotechnology company. He also served as a member of the Board of Directors of GenVec, Inc., a biopharmaceutical company, from 2003 to 2006 and Structural GenomiX, Inc., a biopharmaceutical company from 2001 to 2006. In the not-for-profit sector, he is co-founder and Chairman of Fondation Santé, a member of the Board of Directors of the National Marrow Donor Program (NMDP) and a member of the Board of Visitors of Duke University School of Medicine. Based on Dr. Papadopoulos' experience as an investment banker in the biotechnology/pharmaceutical industries and his resulting strategic and financial expertise, as well as his scientific background and experience with other boards of directors, the Board believes Dr. Papadopoulos has the appropriate set of skills to serve on our Board.

Board of Directors' Leadership Structure and Role in Risk Oversight

Although the Board of Directors does not have a formal policy on whether the roles should be combined or separated, since our inception as Anadys in 2000 we have had a separate Chairman of the Board ("Chairman") and Chief Executive Officer ("CEO"). Our Chairman has the authority, among other things, to call and preside over Board meetings, including meetings of the independent directors, to set meeting agendas and to determine materials to be distributed to the Board, which authority he may choose to exercise independently or through coordination with the CEO (other than presiding over meetings of the independent directors). Accordingly, the Chairman has substantial ability to shape the work of the Board. This leadership structure has been effective in providing flexibility and balance of leadership between the CEO and the non-management directors. As a result, the Company believes that having an independent Chairman enhances the effectiveness of the Board as a whole, and is the appropriate board leadership structure for the Company at this time. We believe that this leadership structure also provides an appropriate forum for the Board to execute its risk oversight function, which is described below.

Our Board of Directors is the central body that oversees the management of material risks at the Company. The Board does not have a standing risk management committee, but rather administers this oversight function directly through the Board as a whole, as well as through various standing Board committees that address risks inherent in their respective areas of oversight. For example, the Audit Committee has the responsibility to review and discuss certain risk policies, including the Company's

major financial risk exposures and the steps taken by management to monitor and control these exposures, and generally provide oversight of risks related to financial reporting. Our Compensation Committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking. Day to day operational risks are generally handled by management, with reporting to and involvement of the Board as necessary. With respect to strategic and business risk, including clinical development risk, our Board as a whole is the level at which we address and monitor such issues, through regular interactions with the CEO and other members of senior management.

Meetings of the Board of Directors

During the year ended December 31, 2010, our Board of Directors held a total of eight formal meetings, including regularly scheduled in-person meetings and teleconferences and special teleconferences. All of our directors attended at least 75% or more of such regularly scheduled in-person, telephonic and special meetings of the Board of Directors and of the committees on which they served that were held during the period for which they were a director or committee member, respectively. As required under applicable listing standards of Nasdaq, during the year ended December 31, 2010 our independent directors met at least twice in regularly scheduled executive sessions at which only the independent directors were present.

The Board of Directors does not have a formal policy with respect to the attendance of members of the Board of Directors at the annual meetings of stockholders. Dr. Worland, our President and Chief Executive Officer and a member of our Board of Directors, was in attendance at our 2010 Annual Meeting.

Below is a description of each committee of the Board of Directors. Our Board of Directors has an Audit Committee, Compensation Committee and Corporate Governance and Nominating Committee and may designate a specially constituted committee from time to time as deemed necessary. Each of the committees has authority to engage legal counsel or other experts or consultants, as it deems appropriate to carry out its responsibilities. The Board of Directors has determined that each member of each committee meets the applicable rules and regulations regarding "independence" and that each member is free of any relationship that would interfere with his individual exercise of independent judgment with regard to the Company.

Audit Committee

The Audit Committee was established by the Board of Directors in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (the Exchange Act), and oversees the Company's corporate accounting and financial reporting processes. For this purpose, the Audit Committee performs several functions. The Audit Committee evaluates the performance of and assesses the qualifications of the independent registered public accounting firm; determines on behalf of the Board of Directors the engagement of the independent registered public accounting firm; determines on behalf of the Board of Directors whether to retain or terminate

the existing independent registered public accounting firm or to appoint and engage a new independent registered public accounting firm; reviews and approves the engagement of the independent registered public accounting firm to perform any proposed permissible services and appropriate compensation for such services; reviews and approves all related party transactions; monitors the rotation of partners of the independent registered public accounting firm on the Company engagement team as required by law; establishes procedures, as required under applicable law, for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters and the confidential and anonymous submission by employees of concerns regarding questionable accounting or auditing matters; reviews the financial statements to be included in the Company's Annual Report on Form 10-K; discusses with management and the independent registered public accounting firm the results of the annual audit and the results of the Company's quarterly financial statement reviews; and has the specific responsibilities and authority necessary to comply with the listing standards of Nasdaq applicable to audit committees. The Board of Directors has adopted a written charter for the Audit Committee, which is available on our website at www.anadyspharma.com.

During 2010, the Audit Committee was initially comprised of three independent directors, Messrs. Foletta, Fotiadis and Holtzman. In July 2010, the Audit Committee was changed to consist of Messrs. Foletta and Fotiadis and Dr. Xanthopoulos. The Board of Directors has determined that all current members of the Audit Committee are independent and that Mr. Holtzman was independent through the change in committee composition in July 2010 (as independence is currently defined by the rules of Nasdaq and Rule 10A-3(b)(1) of the Exchange Act). The Board of Directors has also determined that Messrs. Foletta and Fotiadis are each an "audit committee financial expert" as defined in applicable Securities and Exchange Commission (SEC) rules. The Audit Committee met five times during the year ended December 31, 2010. See "Report of the Audit Committee of the Board of Directors" below.

Compensation Committee

The Compensation Committee is responsible to act on behalf of the Board of Directors in fulfilling the Board of Directors' responsibilities to oversee the Company's compensation policies, plans and programs, to review and determine the compensation of the executive officers of the Company and establish and review general policies relating to compensation and benefits of employees of the Company. The Compensation Committee periodically reviews the appropriateness of the level of compensation provided to our non-employee directors under our Non-Employee Director Compensation Program. In addition, the Compensation Committee reviews at least annually the bonus plan percentages contained in the Executive Officer Bonus Plan and Employee Bonus Plan. The Compensation Committee also administers the granting of stock options and other awards under our stock plans. Further, the Compensation Committee reviews with management the Company's Compensation Discussion and Analysis and considers whether to recommend to the Board of Directors that it be included in the proxy statements and other filings. The Compensation Committee met three times during the year ended December 31, 2010.

During 2010, the Compensation Committee was initially comprised of three independent directors, Messrs. Holtzman and Fotiadis and Dr. Scangos. Following Dr. Scangos' resignation from the Board of Directors in July 2010, the Compensation Committee was changed to consist of Messrs. Holtzman and Fotiadis and Dr. Papadopoulos. Mr. Holtzman resigned from the Board of Directors in January 2011. The Board of Directors has determined that both current members of the Compensation Committee are independent and that Dr. Scangos and Mr. Holtzman were independent through their respective resignation dates (as independence is currently defined by Rule 5605(a)(2) of the Nasdaq Listing Rules). The Board of Directors has adopted a written charter for the Compensation Committee, which is available on our website at www.anadyspharma.com.

Compensation Committee Processes and Procedures

The Compensation Committee conducts an annual performance and compensation review for each of our executive officers and determines salary adjustments and bonus and equity awards at one or more meetings generally held during the last quarter of the year. In addition, the Compensation Committee considers matters related to individual compensation, such as compensation for new executive hires, as well as various compensation policy issues throughout the year. For executives other than the President and Chief Executive Officer, the Compensation Committee receives and considers performance evaluations and compensation recommendations submitted to the Committee by the President and Chief Executive Officer, with input from our former Vice President, Human Capital, who we have engaged as a consultant, as described below. In the case of the President and Chief Executive Officer, the evaluation of his performance is conducted by the Compensation Committee, which determines any adjustments to his compensation as well as awards to be granted. The agenda for meetings of the Compensation Committee is usually determined by its Chairman with the assistance of the Company's President and Chief Executive Officer and Senior Vice President, Legal Affairs, General Counsel and Corporate Secretary. Compensation Committee meetings are regularly attended by the President and Chief Executive Officer and the Senior Vice President, Legal Affairs, General Counsel and Corporate Secretary.

The Committee has delegated administrative authority to our President and Chief Executive Officer and our Senior Vice President, Legal Affairs, General Counsel and Corporate Secretary to approve routine on-hire option grants to employees of the Company, subject to specific limitations. For these grants, the number of shares must be within specific ranges that have been approved by the Committee, the exercise price must be equal to the closing price on the Nasdaq Global Market of the Company's Common Stock on the trading day immediately prior to the date of grant, the shares cannot exceed a specified share number nor exceed a specified total per-year limit, and no grants may be made to any officer covered by Section 162(m) of the Internal Revenue Code of 1986, as amended (the Code), to any officer who is required to disclose his or her ownership of the Company's common stock under Section 16 of the Exchange Act (sometimes referred to as a "Section 16 Officer"), or to any employee with titles or responsibilities above the "director" level. All of these

limitations have been pre-approved by the Committee and these on-hire option grants must be reported on a periodic basis to the Committee and the Board of Directors.

Since October 2009, the Company has engaged Mary Yaroshevsky-Glanville, our former Vice President, Human Capital, as a consultant. Ms. Yaroshevsky-Glanville's position as Vice President, Human Capital was eliminated as of September 30, 2009 as a result of a reduction in force. Effective October 1, 2009, the Company, with the endorsement of the Compensation Committee, engaged Ms. Yaroshevsky-Glanville to provide human resources consulting services for the Company on a part-time basis. As part of this engagement, Ms. Yaroshevsky-Glanville has continued to provide certain compensation related services, related to both executive officer and nonexecutive officer compensation. In this capacity, Ms. Yaroshevsky-Glanville has continued to function in substantially the same role as she had as Vice President, Human Capital. In particular, during the 2010 year-end compensation review, Ms. Yaroshevsky-Glanville gathered industry data for comparable positions and provided such information to the Committee in support of the Committee's annual review of executive compensation. The role of such survey data is discussed in the Compensation Discussion and Analysis section of this proxy statement.

Additional information on the Compensation Committee's processes and procedures for consideration of executive compensation is provided in the Compensation Discussion and Analysis section of this proxy statement.

Corporate Governance and Nominating Committee

The purpose of the Corporate Governance and Nominating Committee is to oversee all aspects of the Company's corporate governance functions on behalf of the Board of Directors: make recommendations to the Board of Directors regarding corporate governance issues, identify, review and evaluate candidates to serve as directors of the Company, serve as a focal point for communication between such candidates, non-committee directors and the Company's management, recommend such candidates to the Board of Directors and make such other recommendations to the Board of Directors regarding affairs relating to the directors of the Company. During 2010, the Corporate Governance and Nominating Committee was comprised of two independent directors, Dr. Papadopoulos and Mr. Foletta. The Board of Directors has determined that both members of the Corporate Governance and Nominating Committee are independent (as independence is currently defined by Rule 5605(a)(2) of the Nasdaq Listing Rules). The Corporate Governance and Nominating Committee formally met once during the year ended December 31, 2010. The Board of Directors has adopted a written charter for the Corporate Governance and Nominating Committee, which is available on our website at www.anadyspharma.com.

Because Anadys is an emerging company with rapidly evolving clinical programs, the Board of Directors does not believe that it is appropriate to adopt, and the Corporate Governance and Nominating Committee has not adopted, a formal policy with respect to a fixed set of minimum qualifications for its candidates for membership on the Board of Directors. Instead, in considering candidates for director, the

Corporate Governance and Nominating Committee will generally consider all relevant factors, including the candidate's applicable expertise and demonstrated excellence in his or her field, the usefulness of such expertise to the Company, the availability of the candidate to devote sufficient time and attention to the affairs of the Company and the candidate's demonstrated character and judgment. Candidates for director will be reviewed in the context of the existing membership of the Board of Directors (including the qualities and skills of the existing directors), the operating requirements of the Company and the long-term interests of its stockholders.

Similarly, the Board does not currently have a formal policy on diversity. Rather, the Committee seeks to maintain a balance of perspectives and backgrounds relevant to the current business of the Company. At this time, we endeavor to have a Board of Directors representing diverse experience within the biotechnology/pharmaceutical industries.

The Corporate Governance and Nominating Committee generally will evaluate and consider all candidates recommended by directors, officers and security holders. The Corporate Governance and Nominating Committee intends to consider security holder recommendations for directors using the same criteria as potential nominees recommended by the members of the Corporate Governance and Nominating Committee or others. The Company has not rejected any nominees proposed by 5% stockholders as the Company has not received any nominees proposed by such 5% stockholders to date.

Our Board of Directors has adopted written corporate governance guidelines that provide a framework for determining general qualifications for directors, which are available on our website at www.anadyspharma.com. The Board periodically reviews, and may modify from time to time, the corporate governance guidelines, Board committee charters and Board practices.

Shareholder Communications with the Board Of Directors

The Board of Directors believes that the Company has in place adequate current methods for receiving communications from its security holders. Accordingly, the Board of Directors has not established a formal process for security holders to send communications to the Board of Directors. However, the Corporate Governance and Nominating Committee of the Board of Directors will consider, from time to time, whether adoption of a formal process for stockholder communications with the Board of Directors has become necessary or appropriate. Security holders may send communications to the Board of Directors by mail at 5871 Oberlin Drive, Suite 200, San Diego, California 92121; by facsimile at (858) 527-1554 or by e-mail at boardofdirectors@anadyspharma.com, each of the foregoing sent "Attn: Board of Directors."

Stockholders who wish to recommend individuals for consideration by the Corporate Governance and Nominating Committee to become nominees for election to the Board of Directors may do so by delivering a written recommendation to the Corporate Governance and Nominating Committee within the timeframe specified in

the Bylaws of the Company that is applicable to matters to be brought before an annual meeting of stockholders. Such communications should be sent to the following address: 5871 Oberlin Drive, Suite 200, San Diego, California 92121, attn: Corporate Governance and Nominating Committee of the Board of Directors. Submissions must include the full name of the proposed nominee, a description of the proposed nominee's business experience for at least the previous five years, including all public company directorship positions during such five year period, complete biographical information, a description of the proposed nominee's qualifications as a director and a representation that the nominating stockholder is a beneficial or record owner of the Company's stock. Any such submission must be accompanied by the written consent of the proposed nominee to be named as a nominee and to serve as a director, if elected. The Corporate Governance and Nominating Committee has not received any recommended nominations from any of the Company's security holders in connection with the 2011 Annual Meeting.

PROPOSAL 2

RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee of the Board of Directors has selected Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2011 and the Board of Directors, on behalf of the Audit Committee, directed management to submit the selection of the independent registered public accounting firm for ratification by the stockholders at the Annual Meeting. Ernst & Young LLP has audited the Company's financial statements since 2000. Representatives of Ernst & Young LLP are expected to be present at the Annual Meeting. They will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

Neither the Company's Bylaws nor other governing documents or law require stockholder ratification of the selection of Ernst & Young LLP as the Company's independent registered public accounting firm. However, the Board of Directors is submitting the selection of Ernst & Young LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Audit Committee will reconsider whether or not to retain that firm. Even if the selection is ratified, the Audit Committee in its discretion may direct the appointment of a different independent registered public accounting firm at any time during the year if they determine that such a change would be in the best interests of the Company and its stockholders.

The affirmative vote of the holders of a majority of the shares present in person or represented by proxy and entitled to vote at the Annual Meeting will be required to ratify the selection of Ernst & Young LLP. Abstentions will be counted toward the tabulation of votes cast on proposals presented to the stockholders and will have the same effect as "Against" votes. Broker non-votes are counted towards a quorum, but

are not counted for any purpose in determining whether this matter has been approved.

**The Board Of Directors Recommends
A Vote FOR Proposal 2.**

Independent Registered Public Accounting Firm — Fees

The following table represents aggregate fees billed to the Company for fiscal years ended December 31, 2010 and 2009, by Ernst & Young LLP, the Company's independent registered public accounting firm.

	Fiscal Year Ended December 31,	
	2010	2009
	(In thousands)	
Audit Fees	\$406	\$377
Audit-Related Fees	—	—
Tax Fees	102	34
All Other Fees	—	—
Total Fees	<u>\$508</u>	<u>\$411</u>

Audit fees relate to the audit of our financial statements, including the audit of internal control over financial reporting, consents, quarterly reviews and review of our filings with the SEC. Audit fees for 2010 also include \$92,500 related to the issuance of comfort letters in conjunction with our equity financings completed in June and October 2010. Audit fees for 2009 also include \$55,000 related to the issuance of a comfort letter in conjunction with our registered direct offering completed in June 2009.

Tax fees relate to the preparation of the Company's state and federal income tax filings and an engagement to review the implications of Section 382 of the Internal Revenue Code of 1986. Tax fees for 2010 also include \$44,715 related to our Internal Revenue Code (IRC) Section 48D Qualifying Therapeutic Discovery Project Applications.

All of the fees described above for fiscal year 2010 and 2009 were pre-approved by the Audit Committee.

Pre-Approval Policies and Procedures

The Audit Committee pre-approves all audit and non-audit services rendered by our independent registered public accounting firm, Ernst & Young LLP. The Audit Committee has not adopted a formal written policy for the pre-approval of audit and non-audit services, but generally pre-approves specified services in the defined categories of audit services, audit-related services, tax services and other services up to specified amounts. Pre-approval may also be given as part of the Audit Committee's approval of the scope of the engagement of the independent registered

public accounting firm or on an individual explicit case-by-case basis before the independent registered public accounting firm is engaged to provide each service. The pre-approval of services may also be given by Mr. Foletta, the Chair of the Audit Committee who has been delegated pre-approval authority by the Audit Committee, but the pre-approval decision must be communicated to the full Audit Committee at its next scheduled meeting.

Report of the Audit Committee of the Board of Directors¹

The Audit Committee of the Board of Directors of Anadys oversees the Company's financial reporting process on behalf of the Board of Directors. The Audit Committee is made up solely of independent directors, as defined under the listing standards of the Nasdaq Stock Market and Rule 10A-3(b)(1) of the Securities Exchange Act of 1934, as amended, and it operates under a written charter adopted by the Board of Directors.

Management has primary responsibility for the consolidated financial statements and the reporting process including the systems of internal controls. Our independent registered public accounting firm is responsible for planning and performing an independent audit of our consolidated financial statements in accordance with auditing standards generally accepted in the United States and for auditing the effectiveness of internal control over financial reporting. Our independent registered public accounting firm is also responsible for expressing an opinion on the conformity of our audited consolidated financial statements with accounting principles generally accepted in the United States.

The Audit Committee has met and held discussions with management and Anadys' independent registered public accounting firm on various topics and events that may have significant financial impact and/or are the subject of discussions between management and the independent registered public accounting firm. The Audit Committee meets with the independent registered public accounting firm, with and without management present, to discuss the results of its examinations, its evaluations of the Company's internal controls and the overall quality of the Company's financial reporting.

The Audit Committee has discussed with the independent registered public accounting firm its judgments as to the quality, not just the acceptability, of the Company's accounting principles and such other matters as are required to be discussed under generally accepted auditing standards in the United States, including those matters set forth in Statement on Auditing Standards No. 61, "Communication with Audit Committees", as adopted by the Public Company Accounting Oversight Board (PCAOB) in Rule 3200T. Anadys' independent registered public accounting

¹ The material in this report is not "soliciting material," is not deemed "filed" with the SEC, and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended or the Exchange Act whether made before or after the date hereof and irrespective of any general incorporation language contained in such filing.

firm has provided the Audit Committee with the written disclosures and letters required by Rule 3526 of the PCAOB, "Communication with Audit Committees Concerning Independence" and the Audit Committee has discussed with the independent registered public accounting firm its independence from the Company.

The Audit Committee has reviewed and discussed the Company's consolidated financial statements as of and for the year ended December 31, 2010 with management and the independent registered public accounting firm. The Audit Committee also reviewed management's assessment of the effectiveness of the Company's internal control over financial reporting and the independent registered public accounting firm's report on the effectiveness of the Company's internal control over financial reporting.

In reliance on these views and discussions referred to above, and the reports of the independent registered public accounting firm, the Audit Committee has recommended to the Board of Directors, and the Board of Directors has approved, the inclusion of the audited consolidated financial statements in Anadys' Annual Report on Form 10-K for the year ended December 31, 2010 for filing with the SEC.

The Audit Committee has selected Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2011 and has presented its selection to the Board of Directors to present to the stockholders for ratification.

Respectfully submitted,

The Audit Committee of the Board of Directors

Mark G. Foletta

Marios Fotiadis

Kleanthis G. Xanthopoulos

EXECUTIVE OFFICERS

The following table sets forth information regarding our executive officers as of March 1, 2011:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Steve Worland, Ph.D.	53	President and Chief Executive Officer
James L. Freddo, M.D.	56	Senior Vice President, Drug Development and Chief Medical Officer
Kevin L. Eastwood	47	Senior Vice President, Corporate Development
James Appleman, Ph.D.	54	Senior Vice President, Research and Chief Scientific Officer
Elizabeth E. Reed, J.D.	40	Senior Vice President, Legal Affairs and General Counsel
Peter T. Slover, CPA	36	Vice President, Finance and Operations

Steve Worland, Ph.D. was appointed President and Chief Executive Officer and a member of the Board of Directors in 2007. Dr. Worland joined Anadys in 2001 as Chief Scientific Officer and served as President, Pharmaceuticals prior to being named CEO. Prior to joining Anadys, Dr. Worland was Vice President, Head of Antiviral Research at Agouron Pharmaceuticals, a Pfizer Company. Dr. Worland was at Agouron from 1988 through the acquisition of Agouron by Warner-Lambert in 1999, where he held various positions and responsibilities that culminated with him assuming global responsibility for anti-infective strategy as Vice President for Warner-Lambert. At Agouron, Warner-Lambert and Pfizer, Dr. Worland led teams responsible for discovery and clinical development in the areas of HIV, HCV and respiratory infections. Dr. Worland was a National Institutes of Health Postdoctoral Fellow in Molecular Biology at Harvard University from 1985 to 1988. He received his B.S. with highest honors in Biological Chemistry from the University of Michigan and his Ph.D. in Chemistry from the University of California, Berkeley.

James L. Freddo, M.D. was appointed a member of the Board of Directors in January 2011 and has served as Senior Vice President, Drug Development and Chief Medical Officer since July 2008. Prior to joining Anadys in July 2006, Dr. Freddo was Vice President, Clinical Site Head and Development Site Head, Pfizer Global Research and Development, La Jolla. Previously at Pfizer, he was Executive Director, Site Therapeutic Area Leader, Clinical Development, Oncology. While at Pfizer, Dr. Freddo led the team responsible for the registration of Sutent® (sunitinib malate), a drug approved by the FDA in January 2006 for treating advanced kidney cancer and gastrointestinal stromal tumors. Prior to Pfizer, Dr. Freddo held a variety of senior management positions at Wyeth-Ayerst Research from December 1996 until June 2002, including Senior Director, Oncology, Senior Director, Infectious Diseases, and Senior Director, Transplantation Immunology. Dr. Freddo currently serves as a member of the Board of Directors of InfuSystem Holdings, Inc., a healthcare services

company. He holds a B.S. degree in Medical Technology from the State University of New York at Stony Brook, and a M.D. degree from the University of North Carolina, where he also completed his fellowship training.

Kevin L. Eastwood joined us in January 2011 as Senior Vice President, Corporate Development. Prior to joining Anadys, Mr. Eastwood was Vice President, Corporate Development at Ambrx, Inc. from May 2006 to December 2010, Senior Vice President, Business Development at Achillion Pharmaceuticals, Inc. from June 2000 to May 2006 and Senior Manager, Business Development at Agouron Pharmaceuticals, Inc. from August 1997 to June 2000. In these positions, Mr. Eastwood was responsible for executing business transactions with a number of leading biotechnology and pharmaceutical companies, including Pfizer, Inc., Merck and Co., Inc., Eli Lilly and Co., and Gilead Sciences. Mr. Eastwood began his pharmaceuticals career in sales and marketing at Marion Laboratories and transitioned to business development while at Agouron. He received a B.S. degree in Biology from Missouri State University.

James Appleman, Ph.D. was named Senior Vice President, Research and Chief Scientific Officer in January 2011. Dr. Appleman joined us in 2001 and has held several positions of increasing responsibility with us including Senior Vice President, Research in 2010, Vice President, Research in 2009, Vice President, Biology from February 2007 to 2009 and Senior Director of Project Management and Planning from 2005 to February 2007, as well as earlier positions. Prior to joining Anadys, Dr. Appleman was a faculty member at St. Jude Children's Research Hospital and subsequently held positions at Gensia, Inc., a biopharmaceutical company and Metabasis, a biopharmaceutical company. Dr. Appleman received a Ph.D. in Biochemistry from Oklahoma State University and completed his postdoctoral training at Dartmouth Medical School.

Elizabeth E. Reed, J.D. has served as our Senior Vice President, Legal Affairs and General Counsel since August 2009. Ms. Reed joined us in 2001 and has served as our Corporate Secretary since January 2002. Previously, Ms. Reed served as our Vice President, Legal Affairs from December 2006 to August 2009, as our Senior Director, Legal Affairs from December 2002 to December 2006 and as our Director of Legal Affairs from October 2001 to December 2002. Prior to joining us, Ms. Reed was associated with the law firms of Cooley Godward LLP and Brobeck, Phleger & Harrison LLP. Ms. Reed is a member of the State Bar of California and received her B.S. in Business Administration with an emphasis in finance from the Haas School of Business at the University of California, Berkeley and holds a J.D., cum laude, from Harvard Law School.

Peter T. Slover has served as our Vice President, Finance and Operations since July 2009. Mr. Slover joined us in 2004 as Manager of Financial Reporting and served in this position through December 2005. From January 2006 to July 2006, Mr. Slover served as the Company's Senior Manager, Financial Reporting and Internal Controls, from August 2006 to December 2006 as our Associate Controller, from January 2007 to December 2008 as our Controller and from January 2009 to July 2009 as our Senior Director, Finance and Corporate Controller. Prior to joining the Company, Mr. Slover

was an auditor at KPMG LLP where he spent seven years in public accounting. Mr. Slover is a licensed Certified Public Accountant in the State of California. Mr. Slover received a B.S. degree in Business Administration from Shippensburg University.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the ownership of the Company's common stock as of February 28, 2011 (except as noted in the footnotes below the table for such instances where the most recent practicable date is earlier than February 28, 2011) by: (i) each director; (ii) each of the executive officers currently employed by us named in the Summary Compensation Table; (iii) all directors and executive officers of the Company as a group; and (iv) all those known by the Company to be beneficial owners of more than five percent of its common stock.

<u>Name of Beneficial Owner</u>	<u>Beneficial Ownership</u>	
	<u>Number of Shares</u>	<u>Percent of Total</u>
5% Stockholders		
QVT Associates GP LLC(1)	11,420,654	19.99%
OrbiMed Advisors LLC(2)	5,737,400	9.98
Wellington Management Company, LLP(3) . . .	4,778,862	8.36
Federated Investors, Inc.(4)	3,783,373	6.60
Great Point Partners, LLC(5)	3,455,000	6.00
Adage Capital Partners, L.P.(6)	3,266,593	5.69
Named Executive Officers and Directors		
Stephen T. Worland, Ph.D.(7)	1,072,990	1.85
Peter T. Slover(8)	155,933	*
James L. Freddo, M.D.(9)	531,798	*
Elizabeth E. Reed, J.D.(10)	360,024	*
Mark G. Foletta(11)	85,000	*
Marios Fotiadis(12)	118,358	*
Stelios Papadopoulos, Ph.D.(13)	907,564	1.59
Kleanthis G. Xanthopoulos, Ph.D.(14)	873,984	1.51
All executive officers and directors as a group (10 persons)(15)	4,313,374	7.18

* Represents beneficial ownership of less than 1% of our outstanding common stock.

(1) The information in the table and this note is derived from a Form 4 filed by QVT Associates GP, LLC with the SEC on January 5, 2011. QVT Fund LP is the direct beneficial owner of 10,299,646 shares and Quintessence Fund L.P. is the direct beneficial owner of 1,121,008 shares. QVT Associates GP, LLC is the

general partner of QVT Fund LP and Quintessence Fund L.P. and therefore may be deemed the beneficial owner of the shares of QVT Fund LP and Quintessence Fund L.P. The address of QVT Associates GP, LLC is 1177 Avenue of the Americas, 9th Floor, New York, New York 10036. There are no relationships between QVT Associates GP, LLC on the one hand, and our officers and directors, on the other hand.

- (2) The information in the table and this note is derived from a Schedule 13G/A filed by OrbiMed Advisors, LLC with the SEC on October 19, 2010. Consists of 1,999,900 shares of common stock beneficially owned by OrbiMed Advisors which it has shared voting and dispositive power, 3,737,500 shares of common stock beneficially owned by OrbiMed Capital LLC which it has shared voting and dispositive power and 5,737,400 shares of common stock beneficially owned by Samuel D. Isaly which he has shared voting and dispositive power. The share amounts for OrbiMed Advisors, OrbiMed Capital LLC and Samuel D. Isaly include warrants to purchase 367,500 shares of common stock. Samuel D. Isaly is President of OrbiMed Advisors LLC and Managing Director of OrbiMed Capital LLC and is a control person of OrbiMed Advisors LLC and OrbiMed Capital LLC. The address of OrbiMed Advisors LLC, OrbiMed Capital LLC and Samuel D. Isaly is 767 Third Avenue, 30th Floor, New York, New York 10017. There are no relationships between the entities related to OrbiMed Advisors LLC on the one hand, and our officers and directors, on the other hand.
- (3) The information in the table and this note is derived from a Schedule 13G/A filed by Wellington Management Company, LLP with the SEC on February 14, 2011. Consists of 4,778,862 shares of common stock beneficially owned by Wellington Management Company, LLP of which it has shared voting power over 4,496,712 shares and shared dispositive power over 4,778,862 shares. The address of Wellington Management Company, LLP is 280 Congress Street, Boston, Massachusetts 02210. There are no relationships between Wellington Management Company, LLP, on the one hand, and our officers and directors, on the other hand.
- (4) The information in the table and this note is derived from a Schedule 13G filed by Federated Investors, Inc. with the SEC on February 9, 2011. Consists of 3,608,373 shares of common stock beneficially owned by Federated Investors, Inc. of which it has sole voting and dispositive power and a warrant to purchase 175,000 shares of common stock. Federated Investors, Inc. (FII) is the parent holding company of Federated Equity Management Company of Pennsylvania and Federated Global Investment Management Corp. (Investment Advisors). Investment Advisors act as investment advisors to registered investment companies and separate accounts that own shares of common stock in Anadys Pharmaceuticals, Inc. The Investment Advisors are wholly owned subsidiaries of FII Holdings, Inc. which is a wholly owned subsidiary of FII. All of FII's voting stock is held in the Voting Shares Irrevocable Trust (Trust) for which John F. Donahue, Rhodora J. Donahue and J. Christopher Donahue act as trustees. The address of FII is Federated Investors Tower, Pittsburg, Pennsylvania 15222.

There are no relationships between FII, on the one hand, and our officers and directors, on the other hand.

- (5) The information in the table and this note is derived from a Schedule 13G/A filed by Great Point Partners, LLC with the SEC on February 14, 2011. Consists of 3,455,000 shares of common stock beneficially owned by Great Point Partners, LLC, Dr. Jeffrey R. Jay, M.D., and Mr. David Kroin which have shared voting and dispositive power. Biomedical Value Fund, L.P. (BVF) is the direct beneficial owner of 1,230,000 shares and the record owner of a warrant to purchase 237,815 shares of common stock. Biomedical Offshore Value Fund, Ltd. (BOVF) is the direct beneficial owner of 1,200,000 shares and the record owner of a warrant to purchase 154,700 shares of common stock. Biomedical Institutional Value Fund, L.P. (BIVF) is the direct beneficial owner of 570,000 shares and the record owner of a warrant to purchase 62,485 shares of common stock. Great Point Partners, LLC (Great Point) is the investment manager of BVF, BOVF and BIVF, and by virtue of such status may be deemed to be the beneficial owner of the BVF, BOVF and BIVF shares. Each of Dr. Jeffrey R. Jay, M.D. (Dr. Jay), as senior managing member of Great Point, and Mr. David Kroin (Mr. Kroin), as special managing member of Great Point, has voting and investment power with respect to the BVF, BOVF and BIVF shares, and therefore may be deemed to be the beneficial owner of the BVF, BOVF and BIVF Shares. Notwithstanding the above, Great Point, Dr. Jay and Mr. Kroin disclaim beneficial ownership of the BVF, BOVF and BIVF shares and the shares underlying the warrants described above, except to the extent of their respective pecuniary interests. The address of Great Point Partners, LLC, Dr. Jeffrey R. Jay, M.D., and Mr. David Kroin is 165 Mason Street, 3rd Floor, Greenwich, CT 06830. There are no relationships between the entities related to Great Point Partners, LLC, on the one hand, and our officers and directors, on the other hand.
- (6) The information in the table and this note is derived from a Schedule 13G/A filed by Adage Capital Partners, L.P. with the SEC on February 14, 2011. Consists of 3,004,093 shares of common stock beneficially owned by Adage Capital Partners, L.P. of which it has shared voting and dispositive power and a warrant to purchase 262,500 shares of common stock. Adage Capital Partners GP, L.L.C., is the general partner of Adage Capital Partners, L.P.; Adage Capital Advisors, L.L.C. is the managing member of Adage Capital Partners GP, L.L.C.; and Robert Atchinson and Phillip Gross are the managing members of Adage Capital Advisors, L.L.C. Each of the persons and entities named above may be deemed to beneficially own the shares beneficially owned by Adage Capital Partners, L.P. The address of Adage Capital Partners, L.P. is 200 Clarendon Street, 52nd floor, Boston, Massachusetts 02116. There are no relationships between the entities related to Adage Capital Partners, L.P., on the one hand, and our officers and directors, on the other hand.
- (7) Includes 242,602 shares of common stock held of record in a family trust of which Dr. Worland is a trustee. Includes 767,334 shares subject to options exercisable within 60 days of February 28, 2011.

- (8) Includes 153,179 shares subject to options exercisable within 60 days of February 28, 2011.
- (9) Includes 477,816 shares subject to options exercisable within 60 days of February 28, 2011.
- (10) Includes 358,139 shares subject to options exercisable within 60 days of February 28, 2011.
- (11) Includes 85,000 shares subject to options exercisable within 60 days of February 28, 2011.
- (12) Includes 118,358 shares subject to options exercisable within 60 days of February 28, 2011.
- (13) Includes 93,358 shares subject to options exercisable within 60 days of February 28, 2011.
- (14) Includes 177,144 shares held of record in a family trust dated January 30, 2002, of which Dr. Xanthopoulos is the trustee. Includes 689,441 shares subject to options exercisable within 60 days of February 28, 2011.
- (15) Includes 1,364,778 shares of common stock held by directors and executive officers. Also includes 2,948,596 shares subject to options exercisable within 60 days of February 28, 2011.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors and executive officers, and persons who own more than ten percent of a registered class of our equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and other equity securities of the Company. Officers, directors and persons who own more than ten percent of a registered class of our equity securities are required by SEC regulation to furnish the Company with copies of all Section 16(a) forms they file.

To our knowledge, based solely on a review of the copies of such reports furnished to the Company and written representations that no other reports were required, during the fiscal year ended December 31, 2010, all Section 16(a) filing requirements applicable to our officers, directors and persons who own more than ten percent of a registered class of our equity securities were complied with and filed on time.

PROPOSAL 3

ADVISORY VOTE ON EXECUTIVE COMPENSATION

Under the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, and Section 14A of the Exchange Act, the Company's stockholders are now entitled to vote to approve, on an advisory basis, the compensation of the Company's named executive officers as disclosed in this proxy statement in accordance with SEC rules. This vote is not intended to address any specific item of

compensation, but rather the overall compensation of the Company's named executive officers and the philosophy, policies and practices described in this proxy statement.

The compensation of the Company's named executive officers that is subject to the vote is disclosed in the Compensation Discussion and Analysis, the compensation tables, and the related narrative disclosure contained in this proxy statement. Some of the key elements of our compensation program include the following:

- Our compensation program, which has a significant performance-based component, is designed to attract, motivate and retain qualified and talented individuals who are committed to achieving Company success.
- Our compensation program is limited to three main components: base salary, long-term equity compensation in the form of stock options subject to vesting and potential bonuses under our bonus program. We do not offer deferred compensation plans, pension arrangements, perquisites or post-retirement health coverage for our NEOs.
- All of our change in control benefits are "double-trigger", meaning that a change in control alone, without related job loss, will not result in change in control benefits for the NEOs. Also, we do not provide tax-gross ups on change in control benefits.

The Board is asking the stockholders to indicate their support for the compensation of the Company's named executive officers as described in this proxy statement by casting a non-binding advisory vote "FOR" the following resolution:

"RESOLVED, that the stockholders approve, on an advisory basis, the compensation of the Company's named executive officers, as set forth in the Compensation Discussion and Analysis, the accompanying compensation tables, and the related narrative discussion in this proxy statement in accordance with the compensation disclosure rules of the Securities and Exchange Commission."

Because the vote is advisory, it is not binding on the Board of Directors or the Company. Nevertheless, the views expressed by the stockholders, whether through this vote or otherwise, are important to management and the Board and, accordingly, the Board and the Compensation Committee intend to consider the results of this vote in making determinations in the future regarding executive compensation arrangements.

Advisory approval of this proposal requires the vote of the holders of a majority of the shares present in person or represented by proxy and entitled to vote at the annual meeting.

**The Board Of Directors Recommends
A Vote FOR Proposal 3.**

PROPOSAL 4**ADVISORY VOTE ON THE FREQUENCY OF SOLICITATION OF
ADVISORY STOCKHOLDER APPROVAL OF
EXECUTIVE COMPENSATION**

The Dodd-Frank Act and Section 14A of the Exchange Act also enable the Company's stockholders to indicate their preference regarding how frequently the Company should solicit a non-binding advisory vote on the compensation of the Company's named executive officers as disclosed in the Company's proxy statements. Accordingly, the Company is asking stockholders to indicate whether they would prefer an advisory vote every year, every other year or every three years. For the reasons described below, the Board recommends that the stockholders select an annual frequency.

The Board believes that an annual advisory vote on the compensation of the Company's named executive officers will best allow our stockholders to provide us with their direct input on our compensation philosophy, policies and practices and is in alignment with the Compensation Committee's annual review of the Company's compensation program.

You may cast your vote on your preferred voting frequency by choosing the option of one year, two years, three years or abstain from voting when you vote in response to the Advisory Vote on the Frequency of Solicitation of Advisory Stockholder Approval of Executive Compensation.

While the Board believes that its recommendation is appropriate at this time, the stockholders are not voting to approve or disapprove that recommendation, but are instead being asked to indicate their preferences, on an advisory basis, as to whether the non-binding advisory vote on the approval of the Company's executive officer compensation practices should be held every year, every other year or every three years. The option among those choices that receives the highest number of votes from the holders of shares present in person or represented by proxy and entitled to vote at the annual meeting will be deemed to be the frequency preferred by the stockholders.

The Board and the Compensation Committee value the opinions of the stockholders in this matter and, to the extent there is any significant vote in favor of one frequency over the other options, even if less than a majority, the Board will consider the stockholders' concerns and evaluate any appropriate next steps. However, because this vote is advisory and therefore not binding on the Board of Directors or the Company, the Board may decide that it is in the best interests of the stockholders that the Company hold an advisory vote on executive compensation more or less frequently than the option preferred by the stockholders. The vote will not be construed to create or imply any change or addition to the fiduciary duties of the Company or the Board.

**The Board Of Directors Recommends
A Vote IN FAVOR OF "ONE YEAR" on Proposal 4.**

COMPENSATION OF EXECUTIVE OFFICERS

Compensation Discussion and Analysis

The Compensation Committee of our Board of Directors (the Committee), has the responsibility to review, determine and approve the compensation packages for our executive officers, including the Named Executive Officers (NEOs). Further, the Committee oversees our overall compensation strategy, including compensation policies, plans and programs.

During 2010, we employed four executive officers, each of whom has been designated as a NEO, including: (1) Stephen T. Worland, Ph.D., our President and Chief Executive Officer (CEO); (2) James L. Freddo, M.D., our Senior Vice President, Drug Development and Chief Medical Officer; (3) Elizabeth E. Reed, our Senior Vice President, Legal Affairs, General Counsel and Corporate Secretary; and (4) Peter Slover, our Vice President, Finance and Operations.

This Compensation Discussion and Analysis (CD&A), sets forth the Company's philosophies underlying the compensation for the NEOs.

Objectives of Our Executive Compensation Program

The primary objective of our executive compensation program is to attract and retain qualified and talented individuals who are enthusiastic about the Company's mission and culture. Another objective of our compensation program is to provide reasonable and appropriate incentives and rewards to our senior management team for building long-term value within the Company. In addition, we intend to be competitive with other similarly situated companies in our industry. The process of discovering and developing drug candidates is a long-term proposition and successful outcomes may not be measurable for several years. Therefore, in order to build long-term value for the Company and its stockholders and in order to achieve our success within this industry, we believe that we must compensate our NEOs in a competitive and fair manner that reflects current Company results but also reflects contributions to building long-term value.

Elements of Our Compensation Program and Why We Chose Each

Main Compensation Components

Our Company-wide compensation program, including for the NEOs, is broken down into three main components: base salary, performance cash bonuses and potential long-term compensation in the form of stock options. We believe these three components constitute the minimum essential elements of a competitive compensation package in our industry.

Salary

Base salary is used to recognize the experience, skills, knowledge and responsibilities required of our NEOs.

Performance Bonus Plan

We have a performance bonus plan under which bonuses are paid to our NEOs based on achievement of Company performance goals and objectives established by the Board as well as on individual performance. The bonus program is intended to: strengthen the connection between individual compensation and Company success; encourage teamwork among all disciplines within the Company; reinforce our pay-for-performance philosophy by awarding higher bonuses to higher performing employees; and help ensure that our cash compensation is competitive.

Each NEO is assigned a target payout under the performance bonus plan, expressed as a percentage of his or her base salary for the year. Actual payouts under the performance bonus plan are based on the achievement of corporate performance goals and an assessment of individual performance, each of which is separately weighted as a component of the NEO's target payout. For the NEOs, the company factor receives the highest weighting (80% to 90%) in order to ensure that the bonus system for our management team is closely tied to our corporate performance. Each factor can be assigned a value of up to 125% for maximum performance. Thus, depending on our performance and the performance of the individual employee, he or she could receive up to 125% of the target bonus amount under the plan.

Equity Incentive Compensation

We view long-term compensation, currently in the form of stock options, as a tool to motivate our NEOs to achieve corporate and individual objectives and encourage them to remain employed by the Company, while aligning their interests with the creation of stockholder value.

Other Compensation

In addition to the three main components of compensation outlined above, we also provide severance and change in control benefits to the NEOs. We believe these severance and change in control benefits are an important element of our compensation program that assist us in retaining talented individuals and that these arrangements help to promote stability and continuity of our senior management team. Further, we believe that the interests of our stockholders will be best served if the interests of our senior management are aligned with theirs. We believe that providing change in control benefits should lessen or eliminate any potential reluctance of our NEOs to pursue potential change in control transactions that may be in the best interests of the stockholders. We also believe that it is important to provide severance benefits to our NEOs, to promote stability and focus on the job at hand.

We also provide benefits to the NEOs that are generally available to all regular full-time employees of the Company, including our medical and dental insurance, life insurance, a 401(k) match for all individuals who participate in the 401(k) plan, and an employee stock purchase plan. At this time, we do not provide any perquisites to any NEOs. Further, we do not have deferred compensation plans, pension

arrangements or post-retirement health coverage for our NEOs. All of our NEOs are “at-will” employees, which means that their employment can be terminated at any time for any reason by either us or them.

Determination of Compensation Amounts

A number of factors impact the determination of compensation amounts for the NEOs, including company and individual performance, competition for talent, each NEO’s total compensation package, assessments of internal pay equity and industry data.

Stock price performance has generally not been a factor in determining annual compensation because the price of our common stock is subject to a variety of factors outside of our control. The Company does not have an exact formula for allocating between cash and non-cash compensation. Cash compensation is generally paid as earned.

Industry Survey Data

In determining compensation adjustments and on-hire base salaries for our executive officers, we generally review the annual Radford Biotechnology Survey which for last year included data from approximately 295 publicly traded companies including approximately 25 publicly traded companies in San Diego. We also review the annual San Diego Biotech Employee Development Coalition Survey which for last year included data from approximately 25 publicly traded life science companies in San Diego. We generally give more weight to the Radford Survey over the San Diego Biotech Employee Development Coalition Survey because the Radford survey has a much larger data sample for each position, represents the national market in which we compete for senior talent and has a larger representation of publicly traded companies.

Determination of Base Salaries

Although we do not formally benchmark against a specific group of comparable companies at this time, we generally use the 50th percentile of the Radford Biotechnology Survey for the NEOs’ respective comparable positions as a guideline for base salary and then adjust from that level based on our assessment of the officer’s level of responsibility, experience, overall compensation structure and individual performance. In addition, we review the San Diego Biotech Employee Development Coalition Survey as another check on the reasonableness of the proposed base salaries for our NEOs. We also look at the historical salary compensation at the Company for each NEO. Merit-based increases to salaries of NEOs are based on our assessment of the individual’s performance.

Performance Bonus Plan

At or prior to the beginning of each year, draft corporate goals that reflect the Company’s business priorities for the coming year are prepared by the CEO with

input from the other executive officers. These goals are weighted by relative importance to the Company's success. The draft goals and proposed weightings are presented to the Board and discussed, revised as necessary, and then approved by the Board. The Committee then reviews the final goals and their weightings to determine and confirm their appropriateness for use as performance measurements for purposes of compensation. The goals and/or weightings may be re-visited during the year and potentially restated in the event of significant changes in corporate strategy.

The performance bonus plan for our executive officers was adopted by the Committee in February 2008. The plan sets forth target bonus opportunities, as a percentage of salary, based on the level of responsibility of the position, ranging from 50% of salary for our CEO, to 40% of salary for our senior executive officers, to 30% of salary for our other executive officers. In setting these percentages, the Committee determined that the above were reasonable and in line with other companies at our stage of development.

Determination of Equity Incentive Compensation

To assist us in assessing the reasonableness of our stock option grant amounts, historically we reviewed the Radford Survey, Executive Percent of Outstanding Stock Options Consulting report which includes stock option data from a cross-section of the companies in the above-mentioned surveys. On-hire stock option grant amounts have generally been targeted at the 50th percentile for that position or similar industry position, adjusted for internal equity, experience level of the individual and the individual's total mix of compensation and benefits provided in his or her offer package. On-hire grants typically vest over four years. The Committee has established internal guidelines for annual stock option grants for all employees, including NEOs, based on performance factors similar to the executive performance bonus plan. These guidelines provide an internal framework for decision-making by the Committee and are not communicated to the individual as a target grant amount. Under the guidelines, the "opportunity" amount for each position approximates what 1/4 of an on-hire grant would be for that position (taking into account the considerations described above). It is generally expected that the "opportunity" amount would be granted if 100% performance is achieved. This calculation is similar to the bonus plan calculation. The equity guidelines also provide a framework for granting up to 125% of the opportunity amount, if superior performance is achieved. However, the equity model amounts are only guidelines and may be adjusted upward or downward by the Committee on a discretionary basis.

Option Grant Practices

All stock options granted to the NEOs are approved by the Committee. Exercise prices are set at equal or greater to Fair Market Value, which is defined in our stock option plans as the closing price of the Company's Common Stock on the Nasdaq Global Market on the trading day immediately prior to the date of grant. Grants are generally made on the employee's start date and at pre-determined dates near year-

end following annual performance reviews. The size of year-end grants for each NEO is assessed against our internal equity guidelines. Current market conditions of grants for comparable positions and internal equity may also be assessed. In addition, grants may be made in connection with promotions or other job related changes. On occasion, in particular circumstances, grants may be made at other times during the year.

Compensation Setting Process

Near the end of the year, the Board and Committee assess our overall corporate performance, and discuss the relative achievement of the corporate goals. The relative achievement of each goal is assessed and quantified and the summation of the individual components results in the corporate goal rating. The non-management members of the Board (without the CEO present) meet to further discuss and approve the final Corporate Goal rating, expressed as a percentage, from 0 to 125%.

Also near the end of the year, the CEO conducts an evaluation of the individual performance of each executive officer (other than himself) and provides the Committee with an assessment of the performance of each executive officer. In determining the individual performance ratings of the NEOs, we assess performance against a number of factors, including each NEO's relative contributions to our corporate goals, demonstrated career growth and level of performance in the face of limited resources and other challenges, as well as the respective officer's overall department performance. This assessment is conducted in a holistic fashion, in contrast to the summation of individual components as is done to arrive at the corporate performance rating.

Once an assessment is conducted regarding the level of individual performance for each NEO in qualitative terms, the Executive Officer Bonus Plan then provides guidelines for translating this performance assessment into a numerical rating. Both the initial qualitative assessment and the translation into a numerical rating are made by the Committee on a discretionary basis. We believe that conducting a discretionary assessment of the individual component of the NEOs' performance ratings provides for flexibility in the evaluation of our NEOs and thereby maximizes our ability to direct the NEOs' performance to potentially changing company priorities throughout the year.

The Committee looks to the CEO's performance assessments of the other NEOs and his recommendations regarding a performance rating for each, as well as input from the other Board members. These recommendations may be adjusted by the Committee prior to finalization. For the CEO, the Committee evaluates the CEO's performance, taking into consideration input from the other Board members.

The CEO also presents any recommended changes to base salary and recommendations for an annual stock option grant amount, referencing the equity guidelines, for each of the NEOs (other than himself). The base salary recommendations are supported by relevant survey data provided by our former Vice President, Human Capital (who we engaged as a consultant upon the termination of her employment in

2009 pursuant to a reduction in force) to better assist the Committee in its review of each individual and position. The Committee also reviews “tally sheets” for each executive officer, which summarize in one document current compensation, severance and change in control benefits, recent compensation decisions and all prior stock option grants to each individual. The Committee uses the tally sheets as a reference tool to see the overall compensation of each executive officer. In setting 2010 compensation amounts, the Committee’s review of the tally sheets did not materially affect the Committee’s compensation decisions. The Committee may also elicit feedback from the other Board members on compensation matters prior to approval.

Around the same time as the CEO conducts his evaluation of the other executive officers, the Committee reviews the CEO’s performance, based on input from the other Board members, and assigns a rating to the CEO, expressed as a percentage, from 0 to 125%. The Committee also sets the CEO’s base salary for the upcoming fiscal year, referencing the relevant survey data and tally sheet. The CEO is not present during the Committee’s deliberations regarding his compensation.

The Corporate Goal rating and individual performance ratings are applied to each employee’s target bonus opportunity under the bonus plan, in the proportions defined for each position. The sum of those components then determines the actual bonus paid for each individual. Under the equity guidelines, described above, the Corporate Goal rating and individual performance ratings may also be used to determine the size of the annual stock option grant for each employee.

Compensation and benefit consultants may, from time to time, be hired by the Committee to assist in developing and reviewing overall salary policies and structures. Other than our former Vice President, Human Capital, we do not currently engage any consultant related to executive and/or director compensation matters. NEOs may have indirect input in the compensation results for other NEOs by virtue of their participation in the performance review and feedback process for the other NEOs.

2010 Compensation Decisions

General Assessment of Corporate Performance in 2010

In assessing the Company’s performance for 2010, the Board and Committee recognized the significant progress the Company had made in advancing the development of ANA598. In 2010, the Company successfully progressed ANA598 through a Phase 2a study while concurrently designing a protocol and conducting the activities necessary to initiate an ANA598 Phase 2b study in early 2011. While the Company was reviewing potential opportunities for a strategic transaction during 2010, the Board and Committee attributed the absence of a strategic transaction during the year primarily to the complex and rapidly evolving HCV landscape, rather than a lack of performance by management. As of the end of 2010, the Board and the Committee believed that the Company had positioned ANA598 as one of the most advanced non-protease inhibitor antivirals in development for HCV and further recognized that the Company had a second clinical-stage HCV asset, ANA773, being readied for a Phase

2a study. Overall, the Board and Committee determined that the Company, with the limited resources of a 30 person organization, had performed well in 2010.

2010 Performance Assessments and Bonus Calculations

For 2010, our performance bonus plan set the following target payouts, expressed as a percentage of base salary: for our CEO, the target bonus opportunity was 50% of base salary; for our Senior Vice President, Drug Development and Chief Medical Officer and our Senior Vice President, Legal Affairs and General Counsel, the target bonus opportunity was 40% of base salary; and for our Vice President, Finance and Operations, the target bonus opportunity was 30% of base salary.

The elements that the Board and Committee established as our overall corporate goals for 2010 included a variety of development and operational objectives. The 2010 goals were established at the end of 2009. The clinical development objectives related to achieving milestones in our ANA598 program, including generating data from the program within stated deadlines. The business development objectives encompassed conducting a business development campaign aimed at determining whether a strategic transaction on attractive terms would be feasible in 2010. The financial objectives consisted of the implementation of a financial option by the middle of the year to enable continued value creation by the Company. The operational and organizational objectives included a cash burn target of no more than \$16.5 million for 2010 (subsequently adjusted to reflect start-up costs during 2010 for the ANA598 Phase 2b study) and maintenance of compliance with regulations, as well as the degree to which we were able to maintain the health and vibrancy of the Company's culture.

In December 2010, the Committee and the Board considered year-end compensation for 2010 performance and 2011 compensation matters. The Board and Committee observed that the Company made significant progress during 2010 on the clinical development front. Specifically, the Company made very efficient progress in the ANA598 program, successfully moving ANA598 through a Phase 2a combination study in HCV infected patients while positioning the Company to be ready to initiate the ANA598 Phase 2b trial in early 2011. Further, the Board and the Committee acknowledged that each of the clinical development objectives were met on time or ahead of schedule. The Board and Committee also recognized that the Company went beyond the stated goals and structured a progressive protocol for the ANA598 Phase 2b study prior to the completion of the Phase 2a study, with the requisite positive regulatory interactions and flexible development planning. In addition to the stated 2010 goals, the Company also made plans to resume development of ANA773 for HCV, and efficiently conducted the activities necessary to ready ANA773 for a Phase 2a study. In light of the above-described progress, the Board and Committee concluded that the Company exceeded the clinical development objectives for 2010 significantly enough to warrant a goal achievement factor of 120%. With respect to business development objectives, the Board and Committee acknowledged that the management team effectively executed a campaign surrounding a potential strategic transaction, and concluded that the fact that a transaction was not completed in 2010

was not due to the performance of management, but rather was attributable to the continuing evolution and complexity of the HCV landscape and timing issues related to third parties' assessments of their internal HCV product portfolios. However, the Board and Committee did take into account the fact that a transaction was not completed, rating the accomplishment of this goal at 40%. Similarly, the Board and Committee noted that the Company was successful in raising money in a difficult fund-raising environment in both June and October of 2010, but that the dilutive nature of the financings warranted a goal achievement factor of 60%. With respect to the operational objectives, the Board and Committee acknowledged that the Company operated within the Board-approved adjusted cash burn number for the year and further maintained compliance with regulations, and rated accomplishment of this goal at 100%. Finally, the Board and Committee concluded that the Company's culture reflected the health and vibrancy of a motivated and committed workforce as measured by employee engagement and achievement of the corporate objectives.

These accomplishments reflected the efforts of our employees, including the NEOs, and were taken into account by the Committee in providing equity grants and annual cash performance awards under our cash bonus program at 90% of target for the corporate performance portion of the awards. In making this determination, the Committee considered our progress against the predefined corporate goals and weightings.

Specifically, the Board and Committee evaluated our corporate achievements on a program basis as follows:

<u>Goal</u>	<u>Pre-defined Weight</u>	<u>Bonus Determination</u>
Clinical development objectives (ANA598 data timelines)	50%	60%
Business Development Objectives	20%	8%
Financial objectives	20%	12%
Operational and Organizational objectives	<u>10%</u>	<u>10%</u>
Total	<u>100%</u>	<u>90%</u>

Individual Performance and Compensation of the President & CEO

Dr. Worland's base salary for 2010 was set at \$425,000 in December 2009 in connection with the 2009 year-end performance and compensation review conducted by the Committee. The salary adjustment from \$410,000 for 2009 to \$425,000 for 2010 reflected a 3% merit increase plus a \$2,700 adjustment to bring Dr. Worland's salary closer to the 50th percentile of CEO salaries for similarly sized companies.

In evaluating Dr. Worland's individual performance for 2010 at the end of the year, the Committee, with input from the other Board members, concluded that Dr. Worland performed at a 100% level, taking into account the significant progress the Company had made during the year in the development of ANA598 and Dr. Worland's strong leadership of the Company during a dynamic strategic period.

Further, the Committee recognized Dr. Worland's leadership in conducting the financings in June and October 2010 and his ability to maintain the health and vibrancy of the Anadys culture, as reflected in the Company exceeding the 2010 clinical development objectives with a committed and productive workforce of fewer than 30 employees. Under the bonus plan formula, utilizing the 90% Corporate Goal rating and a 100% Individual Rating, Dr. Worland's bonus was \$193,375, which the Committee rounded up to \$195,000. Similarly, the application of these performance ratings to the equity guidelines suggested an option award for Dr. Worland of 113,750 shares, which the Committee rounded up to 115,000. In addition, the Board and Committee desired to further incentivize Dr. Worland and to acknowledge his years of service to the Company, with his ten-year anniversary with the Company approaching in March 2011. Reflecting back on this service, and the cumulative contributions Dr. Worland has made to the organization over that time, the Board and Committee determined that granting Dr. Worland an additional stock option was warranted and appropriate. In making this determination, the Board and Committee took into consideration the likelihood that Dr. Worland's 2001 on-hire stock option grant would expire largely unexercised in March 2011. Also, during the 2010 year end compensation review, the Committee reviewed Dr. Worland's salary in comparison to market data and determined that it was under market (targeting the 50th percentile) as compared to CEO positions at similarly sized companies at similar stages of development. The Committee decided to not make an adjustment to Dr. Worland's salary, but rather to take such salary differential into account with the special stock option grant. In light of the above considerations, the Committee approved an additional option grant in the amount of 185,000 shares, for a total year-end option grant to Dr. Worland of 300,000 shares.

Compensation Highlights for the other NEOs

Dr. Freddo

Dr. Freddo's base salary for 2010 was set at \$375,000 in December 2009 in connection with the 2009 year-end performance and compensation review conducted by the Committee. The salary adjustment for Dr. Freddo from \$364,000 for 2009 to \$375,000 for 2010 reflected a 3% merit increase.

During Dr. Freddo's on-hire negotiations in 2006, the Committee approved granting an annual \$50,000 bonus payable to him each July from 2007 through 2011, provided that he remains employed by the Company at each such anniversary date. The Committee viewed this as a necessary inducement for Dr. Freddo to join the Company and abandon long-term retirement incentives he expected to receive had he remained employed at Pfizer. This pre-agreed anniversary bonus is in addition to, and separate from, any performance bonus that Dr. Freddo may be eligible for under the performance cash bonus plan.

In January 2011, the Company entered into a revised severance agreement with Dr. Freddo. The agreement provides a retention incentive for Dr. Freddo to remain employed with the Company through 2011 and beyond by providing Dr. Freddo with a severance payment in the amount of six to twelve months base salary (depending on

the date of resignation) if he resigns for any reason after December 31, 2011. In entering into this arrangement, the Committee determined that 2011 was a critical year for the Company with respect to its clinical development activities and that increasing the likelihood that Dr. Freddo would remain an employee of the Company during 2011 would further the Company's ability to meet its clinical development objectives for the year. A more detailed description of Dr. Freddo's severance and change in control agreement may be found in the "Post-Termination Benefits" section of this proxy statement.

In evaluating Dr. Freddo's performance for 2010, the Committee, with input from the other Board members including Dr. Worland, concluded that Dr. Freddo's individual performance level was at the 125% level. In making such determination, the Committee recognized Dr. Freddo's strong leadership of the clinical organization in conducting the ANA598 Phase 2a study, including the very rapid enrollment of patients in the study, the efficient clinical operations underlying the study conduct, as well as the highly effective planning of the Phase 2b study while the Phase 2a study was ongoing, reflecting flexibility and effective regulatory interactions. This performance level, through application of the Executive Officer Bonus Plan and equity guidelines, resulted in a cash bonus payment of \$142,875 and a year-end stock option grant to purchase 71,438 shares being awarded to Dr. Freddo.

Ms. Reed

Ms. Reed's base salary for 2010 was set at \$275,000 in December 2009 in connection with the 2009 year-end performance and compensation review conducted by the Committee. The salary adjustment from \$255,000 for 2009 to \$275,000 for 2010 reflected a 3% merit increase plus a \$12,350 adjustment to bring Ms. Reed's salary closer to the 50th percentile of similar positions in similarly sized companies.

In evaluating Ms. Reed's performance at the end of 2010, the Committee, with input from the other Board members including Dr. Worland, concluded that Ms. Reed's individual performance level for 2010 was at the 100% level. In making such determination for Ms. Reed, the Committee recognized her contributions toward the Company's two equity financings during the year and the legal department's efficient support of the clinical contracting functions for the ANA598 Phase 2a trial and preparations for the Phase 2b trial, as well as Ms. Reed's contributions to the Company's investor relations communications and her ongoing support of the Company's programs and operations and intellectual property management. This performance level, through application of the Executive Officer Bonus Plan and equity guidelines, resulted in a cash bonus payment of \$100,650 and a year-end stock option grant to purchase 68,625 shares being awarded to Ms. Reed.

Mr. Slover

Mr. Slover's base salary for 2010 was set at \$215,000 in December 2009 in connection with the 2009 year-end performance and compensation review conducted by the Committee. The increase from \$205,000 at the end of 2009 to \$215,000 for 2010 represented a 3% merit increase plus an adjustment of \$3,850.

In evaluating Mr. Slover's performance for 2010, the Committee, with input from the other Board members including Dr. Worland, concluded that Mr. Slover's individual performance level was at the 100% level. In making such determination for Mr. Slover, the Committee recognized Mr. Slover's effective leadership of the finance and operations functions, including the efficient conduct of the financial reporting function, his disciplined approach to budgeting matters and contributions to the Company's financing activities and the effective management of the Company's facilities. This performance level, through application of the Executive Officer Bonus Plan and equity guidelines resulted in a cash bonus payment of \$59,340 and a year-end stock option grant to purchase 51,750 shares being awarded to Mr. Slover.

Severance and Change in Control Benefits

The change in control benefits for all our NEOs have a "double trigger". Double-trigger means that the NEOs will receive the change in control benefits described in the agreements only if there are both (1) a Change in Control of the Company (as defined in the agreements) and (2) a termination by the Company of the NEO's employment "without cause" or a resignation by the NEO for "good reason" (as defined in the agreements) within a specified time period prior to or following the Change in Control. We believe this double trigger requirement maximizes shareholder value because it prevents an unintended windfall to management as no benefits are triggered solely in the event of a Change in Control while providing them appropriate incentives to act in furtherance of a change in control that may be in the best interests of the stockholders.

A further description of the severance and change in control agreements may be found in the "Post-Termination Benefits" section of this proxy statement.

Accounting and Tax Considerations

ASC 718. On January 1, 2006, the Company began accounting for share-based payments in accordance with the requirements of Accounting Standards Codification 718 (ASC 718), *Share-Based Payments*. To date, the adoption of ASC 718 has not impacted our stock option granting practices.

Internal Revenue Code Section 162(m). At this time, the Company does not have a policy to factor in 162(m) limitations into the determination of base salary or bonus amounts since the aggregate salary and bonus payments for each individual are substantially below the \$1,000,000 deductibility limitation.

Section 409A. Section 409A generally changes the tax rules that affect most forms of deferred compensation that were not earned and vested prior to 2005. Under Section 409(A), deferred compensation is defined broadly and may potentially cover compensation arrangements such as severance or change in control pay outs and the extension of the post-termination exercise periods of stock options. We take Code Section 409A into account, where applicable, in determining the timing of compensation paid to our NEOs.

Code Sections 280G and 4999. Sections 280G and 4999 of the Internal Revenue Code of 1986, as amended (Code Sections 280G and 4999) limit our ability to take a tax deduction for certain “excess parachute payments” (as defined in Code Sections 280G and 4999) and impose excise taxes on each NEO who receives “excess parachute payments” in connection with his or her severance from our company in connection with a change in control. We consider the adverse tax liabilities imposed by Code Sections 280G and 4999, as well as other competitive factors, when structuring post-termination compensation payable to our NEOs and generally provide a mechanism for a “better after tax” result for the NEO, which we believe is a reasonable balance between the Company’s interests, on the one hand, and the executive’s compensation on the other.

Report of the Compensation Committee of the Board of Directors¹

The Compensation Committee of the Board of Directors has reviewed and discussed with management the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K contained in this proxy statement. We recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this proxy statement on Schedule 14A for filing with the Securities and Exchange Commission and incorporated into our Annual Report on Form 10-K for the year ended December 31, 2010.

Respectfully submitted,

The Compensation Committee of the Board of Directors

Marios Fotiadis
Stelios Papadopoulos, Ph.D.

¹ The material in this report is not “soliciting material,” is not deemed “filed” with the SEC, and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language contained in such filing.

Summary Compensation Table for 2010

The following information outlines the compensation paid to our NEOs, including salary, bonuses, stock options and other compensation for the years ended December 31, 2010, 2009 and 2008:

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards \$(1)	Non-Equity Incentive Plan Compensation (3)	Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation \$(2)	Total (\$)
Stephen T. Worland, Ph.D. <i>President and Chief Executive Officer</i>	2010	425,000	—	—	224,220	195,000	—	4,275	848,495
	2009	410,000	—	—	361,209	150,000	—	4,254	925,463
	2008	390,000	—	—	127,370	195,000	—	4,270	716,640
Peter T. Slover <i>Vice President, Finance and Operations (4)</i>	2010	215,000	—	—	38,678	59,340	—	4,191	317,209
	2009	194,900	—	—	188,433	41,700	—	3,723	428,756
James L. Freddo, M.D. <i>Senior Vice President, Drug Development and Chief Medical Officer</i>	2010	375,000	50,000(5)	—	53,393	142,875	—	4,275	625,543
	2009	364,000	50,000(5)	—	179,032	142,688	—	4,254	739,974
	2008	341,250	50,000(5)	—	213,370	145,250	—	4,570	754,440
Elizabeth E. Reed, J.D. <i>Senior Vice President, Legal Affairs and General Counsel</i>	2010	275,000	—	—	51,290	100,650	—	4,275	431,215
	2009	255,000	—	—	271,106	84,605	—	4,631	615,342
	2008	230,000	—	—	95,528	71,070	—	4,196	400,794

- (1) Reflects the grant date fair value of awards granted calculated in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718 (ASC 718). Assumptions used in the calculation of this amount for fiscal years ended December 31, 2010, 2009 and 2008 are included in footnote 10 to our audited financial statements for the fiscal year ended December 31, 2010, included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 4, 2011.
- (2) Includes matching contributions paid by us under our Anadys Pharmaceuticals, Inc. 401(k) Profit Sharing Plan.
- (3) Amount paid pursuant to the Anadys Pharmaceuticals, Inc. Executive Officer Bonus Plan adopted in 2008 and updated in 2009.
- (4) Mr. Slover was promoted to Vice President, Finance and Operations and appointed as an executive officer effective July 1, 2009. Prior to his promotion, Mr. Slover was our Senior Director, Finance and Corporate Controller.
- (5) Guaranteed annual bonus, payable each July from 2007 through 2011 pursuant to the terms of Dr. Freddo's offer letter.

Grants of Plan-Based Awards in 2010

The following information sets forth grants of plan-based awards made to the NEOs during the year ended December 31, 2010:

Name and Principal Position	Grant Date	Date Grant was approved, if other than the Grant Date	Estimated Possible Payouts Under Non-Equity Incentive Plan Awards \$(2)			All Other Option Awards: Number of Securities Underlying Awards (#)	Exercise or Base Price of Option Awards (\$)	Closing Market Price of Underlying Security on the Date of Grant \$(1)	Grant Date Fair Value of Stock Options and Awards (\$)
			Threshold	Target	Maximum				
Stephen T. Worland, Ph.D. <i>President and Chief Executive Officer</i>	12/13/2010	—	—	212,500	265,625	300,000	1.02	0.98	224,220
Peter T. Slover <i>Vice President, Finance and Operations</i>	12/13/2010	—	—	64,500	80,625	51,750	1.02	0.98	38,678
James L. Freddo, M.D. <i>Senior Vice President, Drug Development and Chief Medical Officer</i>	12/13/2010	—	—	150,000	187,500	71,438	1.02	0.98	53,393
Elizabeth E. Reed, J.D. <i>Senior Vice President, Legal Affairs and General Counsel</i>	12/13/2010	—	—	110,000	137,500	68,625	1.02	0.98	51,290

- (1) Stock options granted under the Company's 2004 Equity Incentive Plan are granted with an exercise price equal to the previous day's closing price of our stock on the Nasdaq Global Market.
- (2) The amounts shown in these columns represent the threshold, target and maximum payout levels under the Anadys Pharmaceuticals, Inc. Executive Officer Bonus Plan (Bonus Plan). Notwithstanding the terms of the Bonus Plan, the Compensation Committee retains absolute discretion to approve bonus awards that fall above or below any amounts set forth in the Bonus Plan, or no bonus awards. The actual amount of incentive bonus earned by each named executive officer in 2010 is reported under the Non-Equity Incentive Plan Compensation column in the Summary Compensation Table for 2010.

Outstanding Equity Awards as of December 31, 2010

The following information outlines equity awards held by the NEOs as of December 31, 2010:

2011 Proxy Statement

Name and Principal Position	Option Awards					Stock Awards				
	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested	Market Value of Shares or Units of Stock That Have Not Vested	Equity Incentive Plan Awards: Number of Shares, Units, or Other Rights That Have Not Vested	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested	
Stephen T. Worland, Ph.D. <i>President and Chief Executive Officer</i>	—	300,000(1)	—	1.02	12/12/2020	—	—	—	—	
	41,287	123,863(1)	—	2.42	12/2/2019	—	—	—	—	
	33,333	16,667(2)	—	2.24	8/17/2019	—	—	—	—	
	50,200	49,800(1)	—	1.99	12/9/2018	—	—	—	—	
	56,550	18,450(1)	—	2.00	12/6/2017	—	—	—	—	
	83,800	16,200(1)	—	2.32	9/5/2017	—	—	—	—	
	81,700	18,300(3)	—	2.32	9/5/2017	—	—	—	—	
	100,000	—	—	4.88	12/7/2016	—	—	—	—	
	110,000	—	—	8.16	12/15/2015	—	—	—	—	
	50,000	—	—	5.30	9/30/2014	—	—	—	—	
	70,075	—	—	2.95	1/14/2014	—	—	—	—	
	37,249	—	—	2.95	2/11/2013	—	—	—	—	
	136,530	—	—	2.95	3/21/2011	—	—	—	—	
	Peter T. Slover <i>Vice President, Finance and Operations</i>	—	51,750(1)	—	1.02	12/12/2020	—	—	—	—
13,271		39,815(1)	—	2.42	12/2/2019	—	—	—	—	
16,667		8,333(2)	—	2.24	8/17/2019	—	—	—	—	
17,750		32,250(1)	—	1.86	6/30/2019	—	—	—	—	
15,060		14,940(1)	—	1.99	12/9/2018	—	—	—	—	
7,540		2,460(1)	—	2.00	12/6/2017	—	—	—	—	
22,500		—	—	2.29	8/21/2017	—	—	—	—	
14,775		225(1)	—	4.59	1/9/2017	—	—	—	—	
2,000		—	—	4.28	12/19/2016	—	—	—	—	
5,000		—	—	4.60	12/6/2016	—	—	—	—	
10,000		—	—	2.80	8/14/2016	—	—	—	—	
2,500		—	—	8.16	12/15/2015	—	—	—	—	
3,375		—	—	11.74	8/1/2015	—	—	—	—	
1,850		—	—	7.00	12/14/2014	—	—	—	—	
2,000	—	—	7.10	6/30/2014	—	—	—	—		
2,500	—	—	7.90	4/18/2014	—	—	—	—		
James L. Freddo, M.D. <i>Senior Vice President, Drug Development and Chief Medical Officer</i>	—	71,438(1)	—	1.02	12/12/2020	—	—	—	—	
	18,375	55,125(1)	—	2.42	12/2/2019	—	—	—	—	
	23,333	11,667(2)	—	2.24	8/17/2019	—	—	—	—	
	50,200	49,800(1)	—	1.99	12/9/2018	—	—	—	—	
	29,300	20,700(1)	—	2.74	8/4/2018	—	—	—	—	
	37,700	12,300(1)	—	2.00	12/6/2017	—	—	—	—	
	81,700	18,300(1)	—	2.32	9/5/2017	—	—	—	—	
	200,000	—	—	3.00	7/9/2016	—	—	—	—	
Elizabeth E. Reed, J.D. <i>Senior Vice President, Legal Affairs and General Counsel</i>	—	68,625(1)	—	1.02	12/12/2020	—	—	—	—	
	18,215	54,648(1)	—	2.42	12/2/2019	—	—	—	—	
	25,050	49,950(1)	—	2.24	8/17/2019	—	—	—	—	
	16,667	8,333(2)	—	2.24	8/17/2019	—	—	—	—	
	37,650	37,350(1)	—	1.99	12/9/2018	—	—	—	—	
	30,160	9,840(1)	—	2.00	12/6/2017	—	—	—	—	
	61,275	13,725(1)	—	2.32	9/5/2017	—	—	—	—	
	45,000	—	—	4.88	12/7/2016	—	—	—	—	
	30,000	—	—	8.16	12/15/2015	—	—	—	—	
	30,000	—	—	7.00	12/14/2014	—	—	—	—	
	15,686	—	—	2.95	1/14/2014	—	—	—	—	
	8,824	—	—	2.95	2/11/2013	—	—	—	—	
	7,265	—	—	2.95	12/19/2011	—	—	—	—	

-
- (1) 25% of the shares subject to the option shall vest and become exercisable one year from the date of grant with the remaining shares subject to the option vesting in equal monthly installments over the next three year period such that all shares subject to the option will be fully vested and exercisable four years from the date of grant.
 - (2) 25% of the shares subject to the option shall vest and become exercisable six months after the date of grant with the remaining shares subject to the option vesting in equal monthly installments evenly over the next 18 months such that all shares subject to the option will be fully vested and exercisable as of August 18, 2011.
 - (3) 25% of the shares subject to the option shall vest and become exercisable one year from August 24, 2007 with the remaining shares subject to the option vesting in equal monthly installments over the next three year period such that all shares subject to the option will be fully vested and exercisable as of August 24, 2011.

Option Exercises and Stock Vested

The following information sets forth stock options exercised by the NEOs during the year ended December 31, 2010:

Name and Principal Position	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting	Value Realized on Vesting
Stephen T. Worland, Ph.D. . . . <i>President and Chief Executive Officer</i>	—	—	—	—
Peter T. Slover <i>Vice President, Finance and Operations</i>	—	—	—	—
James L. Freddo, M.D. <i>Senior Vice President, Drug Development and Chief Medical Officer</i>	—	—	—	—
Elizabeth E. Reed, J.D. <i>Senior Vice President, Legal Affairs and General Counsel</i>	—	—	—	—

Pension Benefits

None of our NEOs participates in or have account balances in qualified or non-qualified defined benefit plans sponsored by us. Our Compensation Committee may elect to adopt qualified or non-qualified benefit plans in the future if it determines that doing so is in the Company's best interests.

Nonqualified Deferred Compensation

None of our NEOs participates in or have account balances in nonqualified defined contribution plans or other nonqualified deferred compensation plans maintained by us. Our Compensation Committee may elect to provide our officers and other employees with non-qualified defined contribution or other nonqualified deferred compensation benefits in the future if it determines that doing so is in the Company's best interests.

Post-Employment Compensation

The following narrative is a description of the NEOs' severance and change in control arrangements with us to support the numbers included in the table following the narrative. All severance and change in control benefits are contingent upon the NEO executing and delivering to us an effective release and waiver.

Severance Benefits

The Amended and Restated Severance and Change in Control Agreement (Amended and Restated Agreement) for each of the NEOs provides certain benefits in the event that the NEO's employment with us is terminated by us without Cause or the NEO resigns with Good Reason (as such terms are defined in the Amended and Restated Agreement). In such event, and contingent upon delivery of a waiver and release, the NEO will be entitled to the following benefits: (a) a lump sum payment equal to twelve (12) months of the NEO's annual base salary, less standard deductions and withholdings; (b) we will pay the NEO's COBRA group health insurance premiums for the NEO and his or her eligible dependents for a period of twelve (12) months; (c) outplacement services for a period of six (6) months will be made available to the NEO upon the NEO's request, (d) the partial acceleration of vesting of stock options to purchase our common stock that are granted less than one (1) year prior to the date of termination will be provided so that such stock options will be 25% vested on the date of termination and (e) the vested stock options held by the NEO will be automatically amended so that the NEO will be able to exercise such vested stock options during the fifteen (15) month period following the date of termination.

In addition to the severance benefits described above for all NEOs, the Amended and Restated Agreement for Dr. Freddo provides for a severance payment in the event Dr. Freddo resigns from his position with the Company for any reason after December 31, 2011 (the "Retention Benefit"). The minimum Retention Benefit will equal six months of Dr. Freddo's then-current base salary. For each month beyond December 2011 that Dr. Freddo remains employed by the Company, the Retention Benefit will increase by an amount equal to one week of Dr. Freddo's then-current base salary, with the maximum amount of the Retention Benefit not to exceed 12 months base salary. The Freddo Agreement provides that the Retention Benefit will be paid only as an alternative to, and not in addition to, any other salary severance benefits payable under the agreement.

Change in Control Benefits

The Amended and Restated Agreement for each of the NEOs provides certain benefits if the NEO's employment with us is terminated by us without Cause or for Good Reason (as such terms are defined in the Amended and Restated Agreement) within the six (6) month period immediately preceding or the twenty-four (24) month period immediately following a Change in Control (as defined in the Amended and Restated Agreement). In such event, and contingent upon delivery of a waiver and release, the NEO will be entitled to the following benefits: (a) a lump sum payment equal to twelve (12) months of the NEO's annual base salary plus a payment equal to the full annual target bonus (or the amount of the last annual bonus actually paid, if higher) the NEO would be eligible for under the Anadys Pharmaceuticals, Inc. Executive Officer Bonus Plan, less standard deductions and withholdings; (b) we will pay the NEO's COBRA group health insurance premiums for the NEO and his or her eligible dependents for a period of twelve (12) months; (c) outplacement services for a period of six (6) months will be made available to the NEO upon the NEO's request,

and (d) all outstanding options held by the NEO will be automatically amended to provide for the full acceleration of vesting and exercisability of the stock options.

In addition to the Change in Control benefits described above, the Amended and Restated Agreement for Dr. Freddo provides that if Dr. Freddo's employment is terminated without Cause or for Good Reason (as such terms are defined in the Amended and Restated Agreement) within the six (6) month period immediately preceding or the twenty-four (24) month period immediately following a Change in Control (as defined in the Amended and Restated Agreement), then he is entitled to the full acceleration of his anniversary bonus of \$50,000 per year to be paid to him each year until 2011 under the terms of his offer letter dated June 21, 2006.

Potential Payments Under Severance/Change in Control Arrangements

This table sets forth potential payments payable to our current NEOs in the event of a termination of employment under various circumstances. For purposes of calculating the potential payments set forth in the table below, we have assumed that (i) the date of termination was December 31, 2010 and (ii) the stock price was \$1.42, which was the closing market price of our common stock on December 31, 2010, the last business day of the 2010 fiscal year.

<u>Name</u>	<u>If Company Terminates Executive Without Cause or Executive Resigns with Good Reason (\$)</u>	<u>Change in Control (\$)</u>	<u>Termination Following a Change in Control without Cause or Executive Resigns with Good Reason (\$)(5)</u>
Stephen T. Worland, Ph.D.			
Cash Payment	470,512(1)	*	683,012(1)
Acceleration of Options	30,000(2)	*	120,000(2)
Continuation of Benefits	21,453(3)	*	21,453(3)
Outplacement Services	9,000(4)	*	9,000(4)
Peter T. Slover			
Cash Payment	241,694(1)	*	306,194(1)
Acceleration of Options	5,175(2)	*	20,700(2)
Continuation of Benefits	21,453(3)	*	21,453(3)
Outplacement Services	9,000(4)	*	9,000(4)
James L. Freddo, M.D.			
Cash Payment	402,808(1)	*	602,808(1)
Acceleration of Options	7,144(2)	*	28,575(2)
Continuation of Benefits	21,453(3)	*	21,453(3)
Outplacement Services	9,000(4)	*	9,000(4)
Elizabeth E. Reed, J.D.			
Cash Payment	307,908(1)	*	417,908(1)
Acceleration of Options	6,863(2)	*	27,450(2)
Continuation of Benefits	16,974(3)	*	16,974(3)
Outplacement Services	9,000(4)	*	9,000(4)

-
- (1) Includes severance payment and accrued and unused vacation time as of December 31, 2010.
 - (2) Determined by taking excess of the fair market value of our common stock on December 31, 2010, less the exercise price of each accelerated option.
 - (3) Reimbursement for continued health insurance coverage under COBRA.
 - (4) Cost of outplacement services.
 - (5) Amounts based on Amended and Restated Severance and Change in Control Agreements entered into in January and February 2011.
- * No benefits provided.

Compensation of Directors

Non-Employee Director Compensation

Under the terms of our Non-Employee Director Compensation Program, the Chairman of the Board is eligible to receive an annual cash stipend for his service in such capacity and for service on the Board of \$30,000, the Chairs of each of the Audit Committee, the Compensation Committee and the Corporate Governance and Nominating Committee are eligible to receive an annual cash stipend for service in such capacities and for service on the Board of \$25,000 and each other non-employee director is eligible to receive an annual cash stipend for service on the Board of \$20,000. In addition, each non-employee director is eligible to receive \$2,500 for each in-person Board meeting at which the director is present and \$500 for each Board meeting at which the director participates by telephone. In addition, each member of the Audit Committee, the Compensation Committee, the Corporate Governance and Nominating Committee and/or any specially constituted committee, if so designated by the Board, is eligible to receive \$500 for each committee meeting at which the director is present or participates by telephone.

Total cash compensation for the Chairman of the Board is capped at \$50,000 per calendar year, \$45,000 per calendar year for the Chairs of each of the Audit Committee, the Compensation Committee and the Corporate Governance and Nominating Committee, and \$40,000 for each other non-employee director.

Under the terms of the Non-Employee Director Compensation Program, each non-employee director is eligible to receive an annual option grant to purchase 15,000 shares of our common stock under our 2004 Non-Employee Directors' Stock Option Plan on the date of each Annual Meeting. Each new non-employee director receives an option grant to purchase 25,000 shares of our common stock upon his or her appointment or election to our Board of Directors under our 2004 Non-Employee Directors' Stock Option Plan.

Reimbursement of Expenses

Non-employee directors are also reimbursed for reasonable out-of-pocket expenses in connection with attending meetings of our Board of Directors and committees of the Board of Directors.

Director Compensation Table for 2010

The table below summarizes the compensation paid by the Company to our non-employee directors for the fiscal year ended December 31, 2010.

Name(1)	Year	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards \$(2)(3)	Non-Equity Incentive Plan Compensation (\$)	Change in Pension Value and Non- Qualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
Mark G. Foletta	2010	40,500	—	24,993	—	—	—	65,493
Marios Fotiadis	2010	35,500	—	24,993	—	—	—	60,493
Steven H. Holtzman(4)	2010	40,715	—	24,993(4)	—	—	—	65,708
Stelios Papadopoulos, Ph.D.	2010	39,000	—	24,993	—	—	—	63,993
George A. Scangos, Ph.D.(5)	2010	32,000	—	24,993(5)	—	—	—	56,993
Kleanthis G. Xanthopoulos, Ph.D.	2010	34,000	—	24,993	—	—	—	58,993

- (1) Stephen T. Worland, Ph.D., our President and Chief Executive Officer, is not included in this table as he was an employee during the year ended December 31, 2010 and thus received no compensation for his services as a director.
- (2) Reflects the grant date fair value of awards granted calculated in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718 (ASC 718). Assumptions used in the calculation of this amount for fiscal years ended December 31, 2010, 2009 and 2008 are included in footnote 10 to our audited financial statements for the fiscal year ended December 31, 2010, included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 4, 2011.
- (3) As of December 31, 2010, each director has the following number of options outstanding: Mark G. Foletta: 86,250, Marios Fotiadis: 119,608, Steven H. Holtzman: 56,875 (see note 4 below), Stelios Papadopoulos, Ph.D.: 94,608, George A. Scangos, Ph.D.: 80,580 (see note 5 below) and Kleanthis G. Xanthopoulos, Ph.D.: 690,691.
- (4) Mr. Holtzman resigned from the Board of Directors effective January 4, 2011. In conjunction with Mr. Holtzman's resignation from the Board of Directors, we modified his stock options. We calculated the additional non-cash share-based expense associated with the extended exercisability period for his vested options in accordance with ASC718. The incremental fair value associated with the modification of Mr. Holtzman's stock options was \$41,812.
- (5) Dr. Scangos resigned from the Board of Directors effective July 20, 2010. In conjunction with Dr. Scangos' resignation from the Board of Directors, we modified his stock options. We calculated the additional non-cash share-based expense associated with the extended exercisability period for his vested options in accordance with ASC718. The incremental fair value associated with the modification of Dr. Scangos' stock options was \$44,335.

CERTAIN TRANSACTIONS

Transactions with Related Persons

The Audit Committee reviews and approves all related party transactions. We have not adopted a formal related-party transactions policy. There were no related party transactions during fiscal year 2010.

Other Transactions

We have entered into indemnity agreements with our directors and officers for the indemnification and advancement of expenses to these persons to the fullest extent permitted by law.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for proxy statements and annual reports with respect to two or more stockholders sharing the same address by delivering a single set of these materials addressed to those stockholders. This process, which is commonly referred to as “householding,” potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are Anadys stockholders will be “householding” our proxy materials. A single set of proxy materials will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be “householding” communications to your address, “householding” will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in “householding” and would prefer to receive a separate proxy statement and annual report, please notify your broker, direct your written request to Anadys Pharmaceuticals, Inc., 5871 Oberlin Drive, Suite 200, San Diego, California 92121, attn: Investor Relations or contact our Associate Director, Investor Relations at (858) 530-3600. Stockholders who currently receive multiple copies of our proxy materials at their address and would like to request “householding” of their communications should contact their broker.

ANNUAL REPORT

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2010 will be mailed to stockholders of record at the close of business as of April 6, 2011. Our Annual Report does not constitute, and should not be considered, a part of this Proxy.

For any person who was a beneficial owner of our common stock on the record date, a copy of our Annual Report on Form 10-K will be furnished without charge upon receipt of a written request identifying the person so requesting a report as a

stockholder of our company at such date. Requests should be directed to Anadys Pharmaceuticals, Inc., 5871 Oberlin Drive, Suite 200, San Diego, California 92121, Attention: Investor Relations.

OTHER MATTERS

The Board of Directors knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on such matters in accordance with their best judgment.

By Order of the Board of Directors

/s/ Elizabeth E. Reed

Elizabeth E. Reed
Corporate Secretary

April 8, 2011

[THIS PAGE INTENTIONALLY LEFT BLANK]

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

Form 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2010

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number 0-50632

ANADYS PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

22-3193172
(I.R.S. Employer
Identification No.)

5871 Oberlin Drive, Suite 200, San Diego, California
(Address of principal executive offices)

92121
(Zip Code)

Registrant's telephone number, including area code: 858-530-3600

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of Each Class</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock, \$0.001 par value	Nasdaq Global Market

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark whether the registrant is a well-known seasoned issuer as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark whether the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of the common stock held by non-affiliates of the registrant computed by reference to the closing price of the registrant's common stock reported on the Nasdaq Global Market as of the last business day of the registrant's most recently completed second fiscal quarter was approximately \$60,521,084 as of such date. In calculating such aggregate market value, shares of common stock owned of record or beneficially by officers or directors, and persons or entities known to the registrant to own more than ten percent of the registrant's voting securities were excluded because such persons or entities may be deemed to be affiliates. This number is provided only for purposes of this Annual Report on Form 10-K and the registrant disclaims the existence of control or any admission thereof for any other purpose.

As of February 28, 2011, the Registrant had outstanding 57,141,223 shares of common stock.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Company's Proxy Statement to be filed with the Securities and Exchange Commission in connection with the 2011 Annual Meeting of Stockholders are incorporated herein by reference into Part III.

**ANADYS PHARMACEUTICALS, INC.
ANNUAL REPORT ON FORM 10-K**

Table of Contents

	<u>Page</u>
PART I	
Item 1. Business	3
Item 1A. Risk Factors	25
Item 1B. Unresolved Staff Comments	50
Item 2. Properties	50
Item 3. Legal Proceedings	50
Item 4. Reserved	50
PART II	
Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	50
Item 6. Selected Financial Data	53
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations	55
Item 7A. Quantitative and Qualitative Disclosure About Market Risk	66
Item 8. Financial Statements and Supplementary Data	66
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	66
Item 9A. Controls and Procedures	66
Item 9B. Other Information	69
PART III	
Item 10. Directors, and Executive Officers and Corporate Governance	69
Item 11. Executive Compensation	69
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	69
Item 13. Certain Relationships and Related Transactions, and Director Independence	70
Item 14. Principal Accounting Fees and Services	70
PART IV	
Item 15. Exhibits and Financial Statement Schedules	71

INFORMATION RELATED TO FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements. These forward-looking statements involve a number of risks and uncertainties. Such forward-looking statements include statements about our development plans and programs, clinical trials, strategies and objectives, and other statements that are not historical facts, including statements which may be preceded by the words “intend,” “will,” “plan,” “expect,” “anticipate,” “estimate,” “aim,” “seek,” “believe,” “hope” or similar words. For such statements, we claim the protection of the Private Securities Litigation Reform Act of 1995. Readers of this Annual Report on Form 10-K are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date on which they are made. We undertake no obligation to update publicly or revise any forward-looking statements. Actual events or results may differ materially from our expectations. Important factors that could cause actual results to differ materially from those stated or implied by our forward-looking statements include, but are not limited to, the risk factors identified in our periodic reports filed with the Securities and Exchange Commission (SEC), including, without limitation, those discussed in “Item 1A. Risk Factors” and in “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” of this Annual Report on Form 10-K.

PART I

Item 1. *Business*

Overview

Anadys Pharmaceuticals, Inc. is a biopharmaceutical company dedicated to improving patient care by developing novel medicines for the treatment of hepatitis C. We believe hepatitis C represents a large and significant unmet medical need. Our objective is to contribute to an improved treatment outcome for patients with this serious disease.

We are currently focusing most of our efforts on the development of ANA598, a direct-acting antiviral (DAA) for the treatment of hepatitis C. We are also making plans to resume the clinical development of ANA773, an oral, small-molecule inducer of endogenous interferons that acts via the Toll-like receptor 7, or TLR7, pathway for the treatment of hepatitis C.

Our expertise is based on two distinct scientific approaches to treating disease. With ANA598 we are focused on developing a direct-acting antiviral, meaning a product candidate that acts by directly interacting with, and blocking the function of, a component of the virus. We discovered ANA598 through an extensive structure-based drug design program that focused on parameters we feel are critical for success in chronic viral diseases, including potency and sustained drug levels in blood. With ANA773, the focus is to stimulate the patients’ own immune systems to block cells infected with the hepatitis C virus from further producing more virus particles and amplifying the infection. ANA773 stimulates the immune system through activating a

key receptor on immune cells known as TLR7. Our knowledge of TLR7 is buttressed by an extensive preclinical program exploring the pharmacology of this receptor and by previous clinical experience with other molecules that act via the TLR7 mechanism.

We have also investigated ANA773 in a separate Phase I trial for the treatment of patients with advanced cancer. Although we believe that ANA773 has potential utility in cancer, we do not have plans to continue the development of ANA773 for this indication at this time.

Anadys retains all commercialization rights to both ANA598 and ANA773, which were discovered at Anadys.

ANA598

ANA598 is a DAA that blocks the hepatitis C virus' (HCV) ability to multiply by inhibiting the viral RNA polymerase. ANA598 belongs to a class of DAAs referred to as non-nucleosides. We believe non-nucleosides will become an important component of future combination regimens used to treat HCV infection, similar to the role played by non-nucleoside inhibitors in HIV therapy. ANA598 has demonstrated positive antiviral response and a favorable safety and tolerability profile in a Phase IIa combination study, as described below. ANA598 has also completed two long-term chronic toxicology studies (26 weeks duration in rats and 39 weeks duration in monkeys) with favorable results. Furthermore, ANA598 has demonstrated the pre-clinical properties, including potency, pharmacokinetics and early safety, that we believe are prerequisites for successful development in the HCV area.

In 2009 we initiated a Phase IIa clinical study of ANA598 in combination with pegylated interferon-alfa and ribavirin, which is the current standard of care (SOC) for the treatment of hepatitis C. Dosing of ANA598 in this study concluded in 2010. In the Phase IIa study, treatment-naïve (previously untreated) genotype 1 patients received ANA598 or placebo in combination with SOC for 12 weeks at dose levels of 200 mg twice daily (bid) or 400 mg bid, each with a loading dose of 800 mg bid on day one. After week 12, patients continued receiving SOC alone. Patients who achieved undetectable levels of virus at weeks four and 12 were randomized to stop all treatment at week 24 or 48. The primary endpoint of the study was the proportion of patients who achieved undetectable levels of virus at week 12 (defined as complete Early Virological Response, or cEVR). Additional endpoints include safety and tolerability as well as the proportion of patients with undetectable levels of virus at week four (defined as Rapid Virological Response, or RVR). Patients are being followed for 24 weeks after stopping therapy to determine the rate of Sustained Virological Response, or SVR. Approximately 90 patients participated in this study — with approximately 30 patients receiving ANA598 and 15 receiving placebo at each dose level.

In 2010, we reported cEVR data from the ANA598 Phase IIa study, showing that ANA598 added to SOC accelerated the rate of viral clearance, with comparable antiviral response at ANA598 doses of 200 mg bid and 400 mg bid. ANA598 showed

an excellent safety profile at both dose levels through the 12 weeks of dosing, with reported adverse events being typical for patients treated with interferon and ribavirin alone, although conclusions regarding safety cannot be made until results in more patients over longer duration are known. Based on a more favorable tolerability profile at 200 mg bid compared to 400 mg bid, and comparable antiviral response at both doses, we selected 200 mg bid as the dose to take forward into Phase IIb. The resistance profile of ANA598 seen in the Phase IIa study was very favorable, with only a single patient (<2% of patients in the ANA598 arms) experiencing viral breakthrough while receiving ANA598 plus SOC. Initial SVR data has also been encouraging. We intend to analyze the remaining SVR data after all patients have been off therapy for 24 weeks, which we expect to occur in the summer of 2011. We plan to analyze the entire data set at that time and potentially submit the data for presentation at a medical conference. We cannot guarantee that the remaining SVR data will be as favorable as the data we have seen to date.

In January 2011 we initiated a Phase IIb clinical study of ANA598 in combination with SOC for the treatment of hepatitis C. In the Phase IIb study, approximately 200 chronically infected genotype 1 hepatitis C patients are to receive ANA598 200 mg bid in combination with SOC, with a loading dose of 800 mg ANA598 bid on day one. In addition, approximately 66 chronically infected genotype 1 hepatitis C patients are to receive placebo added to SOC. Enrollment is expected to include approximately equal numbers of treatment-naïve patients and treatment-experienced patients who have failed a prior course of pegylated interferon and ribavirin, including difficult to treat prior null-responders. Treatment duration for treatment-naïve patients will be response-guided, while treatment-experienced patients are to receive all three agents for 48 weeks, with all patients receiving SOC and either ANA598 or placebo for a concurrent duration. We expect to receive viral response data through 24 weeks of treatment prior to the end of 2011. The Phase IIb study is being conducted at a number of sites within and outside of the United States.

Substantial further investment will be necessary in order to progress ANA598 beyond the events referenced above and through additional clinical testing before regulatory approval can be sought.

ANA773

ANA773 is a novel, oral inducer of endogenous interferons that acts via the TLR7 pathway that we have investigated as a treatment for both HCV and cancer. Both the prodrug and its active substance were discovered, designed and synthesized by Anadys scientists. Animal pharmacology studies have shown that ANA773 can elicit desired immune responses and that components of the response can be modulated by both dose and schedule of administration. We have also shown in our Phase I HCV clinical study that ANA773 can stimulate the immune system at a tolerated dose.

Because interferon-alfa is the foundation of the current standard of care for hepatitis C and the current approval strategies of DAAs are based on the addition of

such DAAs to interferon-based regimens, we believe that an oral agent that stimulates interferon production with improved tolerability could potentially displace interferon from future regimens that contain DAAs. We believe that ANA773 may offer the opportunity to be such an oral interferon replacement.

In June 2009, in order to direct sufficient investment toward ANA598, we suspended development of ANA773 prior to our receipt of data from the last cohort enrolled in a monotherapy trial of ANA773 in HCV patients. The data from this last 2000 mg cohort suggests that the antiviral activity of ANA773 in HCV patients could be comparable to pegylated interferon over a similar timeframe. We also believe that recent developments in the HCV landscape, including clinical data indicating that it may be difficult to replace pegylated interferon entirely in the treatment of HCV, support the potential commercial value of an oral interferon replacement such as ANA773. As a result, in the fall of 2010 we decided to resume clinical investigation of ANA773 in HCV. We are preparing to conduct a 28 day combination study of ANA773 with ribavirin. If supported by the data from the first cohorts utilizing ANA773 and ribavirin only, this study may also include additional cohorts in which ANA773 will be tested as a triple combination with ribavirin and a DAA, to parallel the likely future use of interferon. We intend to conduct this study in Europe and potentially other countries, and we expect that up to approximately 75 patients will participate in the trial, inclusive of the DAA cohorts. We expect to receive four week data from the first two cohorts of ANA773 plus ribavirin in this study during the fourth quarter of 2011.

Substantial further investment will be necessary in order to progress ANA773 beyond the events referenced above and through additional clinical testing before regulatory approval can be sought.

Industry Background

HCV

Based on available market data, we estimate that the global HCV market in 2010 was between \$2 and 3 billion. Due to significant global prevalence and substantial unmet medical need, improving the treatment of chronic HCV infection remains an important priority for the medical community and the pharmaceutical industry. Many patients with chronic HCV infection do not receive the current standard of care due to concerns about adverse events or have incomplete response to the current standard of care. If untreated or inadequately treated, chronic HCV infection can result in significant liver damage (cirrhosis), liver transplantation and liver cancer.

The World Health Organization (WHO) estimates that 170 million people globally are chronically infected with HCV and 3 to 4 million people are newly infected each year. Cirrhosis develops in about 10% to 20% of people with chronic infection, and liver cancer develops in 1% to 5% of people with chronic infection over a period of 20 to 30 years. It is estimated that more than 3 million people are chronically infected with HCV in the U.S. and that as of 2009 only about 100,000 of these patients were under treatment. The National Institutes of Health estimates that

HCV results in approximately 15,000 deaths in the U.S. annually and the Center for Disease Control and Prevention has estimated that the number of deaths would increase to nearly 40,000 by 2010. HCV also exacerbates the severity of underlying liver disease when it coexists with other hepatic conditions. In particular, liver disease progresses more rapidly among persons with alcoholic liver disease and HIV infection.

There is currently no vaccine available to prevent infection with HCV. The current standard of care for treatment of chronic HCV infection is a combination of pegylated interferon-alfa and ribavirin. Interferon-alfa is administered by injection and results in abnormally high levels of this cytokine circulating systemically throughout the body. Therapy with interferon-alfa causes a number of side effects in many patients, including depression, drops in blood cell count and flu-like symptoms, sometimes experienced during the entire year-long primary course of therapy that is standard for treatment of patients infected with genotype 1 HCV, the most difficult patient group to treat. These side effects may make patients feel worse than foregoing treatment, which reduces their motivation to initiate or continue HCV therapy. Many patients take additional drugs to treat these side effects, further increasing the cost and the risk of additional side effects to the patient. As a result, poor compliance with the HCV course of therapy may decrease the patient response rate.

In addition to the side effects, current therapies do not provide sustained elimination of the virus, called Sustained Virologic Response (SVR), for a large proportion of chronically infected patients. For example, in clinical trials, approximately 50 percent of the genotype 1 patients, which represent the largest portion of HCV patients in the U.S., Europe and Japan, do not achieve sustained virologic response six months after the end of the treatment. Due to the lack of alternative treatments, patients without a sustained virologic response have no other treatment option but to undergo a second 48-week course of interferon-alfa-based therapy with a different brand of interferon-alfa. This second course of therapy subjects the relapsed patient to a similar risk of side effects as the previous course of therapy and offers the benefit of SVR in only a small fraction of patients who complete the 48 week treatment.

In response to the limitations of existing treatments for HCV infection, direct acting antiviral (DAA) therapies (including protease, polymerase and NS5A inhibitors) have emerged as a potential addition to or alternative to the current standard of care. Unlike interferons, which work by stimulating the immune system's response to viral infection, HCV DAAs directly target the virus by inhibiting the protease, polymerase or NS5A region of the virus. Accordingly, DAAs have the potential to significantly improve treatment outcomes, when added to the standard of care in difficult-to-treat patients, including patients infected with HCV genotype 1. The addition of DAAs to the standard of care could also lead to shorter treatment duration, which could increase patient compliance. While DAAs will likely initially be used in combination with pegylated interferon-alfa and ribavirin, it may be possible eventually to replace one or both components of the current treatment regimen with a

combination of oral therapies directed at HCV, including protease, polymerase and NS5A inhibitors.

Quantification of viral concentration (viral load) in the blood is an accepted surrogate of clinical effect in viral diseases. New treatments are evaluated on the ability to decrease or eliminate detectable viral particles in blood. With viral load as an accepted surrogate, proof of concept in the treatment of viral diseases can be obtained in Phase I human clinical trials. We believe this early proof of concept results in a higher probability of success post Phase I than the probability of success associated with drug development in many other therapeutic areas.

Toll-Like Receptors

Toll-like receptors — or TLRs — are a relatively new scientific discovery, though their origins date back hundreds of millions of years. TLRs evolved as a way to protect organisms against pathogens such as viruses and bacteria. This defense mechanism has proven so effective that it is an integral part of the human immune system today and a promising target for innovative new medicines.

In 1997, the first human TLR was cloned. To date, scientists have discovered 10 TLRs in humans, each recognizing generic molecular patterns associated with a variety of invading pathogens.

TLR Agonists in Viral Diseases

Certain TLRs are responsible for fighting bacterial and fungal infections; others respond specifically to viral infections.

Unlike adaptive immunity, which enables the immune system to remember and fight specific infections that it has encountered before, innate immunity is the ability to recognize foreign invaders upon their very first meeting. This function is regulated in part by TLRs, a family of proteins that serve as a first line of defense in the body.

Once a TLR recognizes a particular pathogen, it launches a dual assault. First, it triggers the body's innate immunity, initiating an inflammatory response to fight the invader that includes induction of interferon, a natural disease fighter that is the basis for many approved products. It then alerts and educates the body's adaptive immune system so that it will recognize the pathogen in the future. If TLRs fail, the body is left vulnerable to infection.

Our Strategy

The key elements of our strategy include the following:

- *Advance the Development of ANA598 in HCV.* We are developing ANA598, a DAA, as a treatment for hepatitis C. During 2011 we intend to:
 - Conduct a Phase IIb study of ANA598 with SOC;
 - Obtain 8-week viral response data for treatment-naive patients from the ANA598 Phase IIb study;

- Obtain 12-week viral response data from the ANA598 Phase IIb study;
- Obtain 24-week viral response data from the ANA598 Phase IIb study; and
- Analyze final SVR data from the ANA598 Phase IIa study.
- *Maintain flexible development avenues for ANA598.* We are developing ANA598 with the intention of maintaining flexibility to participate in a broad array of potential treatment paradigms as the HCV landscape evolves. Among other things, this flexibility encompasses:
 - Building up the safety database by conducting the current Phase IIb study, which will be relevant for all development avenues; and
 - Setting the stage for utilizing ANA598 in combination with other DAAs.
- *Advance the Development of ANA773 in HCV.* We are also developing ANA773, a selective TLR7 agonist, as a treatment for hepatitis C. During 2011 we intend to:
 - Initiate a Phase IIa 28-day combination study of ANA773 and ribavirin; and
 - Obtain 4 week viral load data for ANA773 with ribavirin.
- *Opportunistically Explore Strategic Alliances around our product candidates.* We intend to continue to explore potential strategic alliances and other transactions around ANA598 and ANA773.

We currently have no ongoing collaborations.

Our Development Programs

ANA598 for HCV

ANA598 is a direct-acting antiviral (DAA) that blocks the hepatitis C virus' ability to multiply by inhibiting the viral RNA polymerase. ANA598 belongs to a class of DAAs referred to as non-nucleosides. We believe non-nucleosides will become an important component of future combination regimens used to treat HCV infection, similar to the role played by non-nucleoside inhibitors in HIV therapy. In 2007 we selected ANA598 as a development candidate. This selection represented the culmination of a comprehensive structure-based drug design program directed towards the viral RNA polymerase. ANA598 has demonstrated positive antiviral response and a favorable safety and tolerability profile in a Phase IIa combination trial, as described below. ANA598 has also completed two long-term chronic toxicology studies (26 weeks duration in rats and 39 weeks duration in monkeys) with favorable results. The completed toxicology studies confirm the favorable toxicology profile of ANA598 and support dosing durations of as long as one year if desired. Furthermore, ANA598 has demonstrated the preclinical properties, including potency, pharmacokinetics and early safety, that we believe are prerequisites for successful development in the HCV area. We are currently conducting a Phase IIb combination study of ANA598.

We believe that non-nucleoside NS5B polymerase inhibitors offer an exciting potential new way to treat HCV infection, as part of combination regimens which may include other DAAs (such as protease inhibitors, nucleoside polymerase inhibitors, NS5A inhibitors and/or cyclophilin inhibitors) and/or immunomodulators (such as pegylated interferon). We believe that polymerase inhibitors have the potential to be equally important components of future regimens as protease inhibitors, which is another class of HCV DAAs currently in clinical development by a number of companies, including Vertex (with Mitsubishi and Tibotec/Johnson & Johnson) and Merck. Historically, it has been challenging to identify non-nucleoside polymerase inhibitors that display both potency and sustained drug levels in blood. With ANA598, we believe we have created a product candidate that has the potential to overcome this challenge. We believe that we have the opportunity to be competitive in the HCV landscape as we believe that ANA598 is one of the most advanced and well characterized non-nucleoside polymerase inhibitors in development for the treatment of HCV. Furthermore, to our knowledge the number of non-nucleosides in development is smaller than the number of potentially attractive combinations that can be formed with attractive protease inhibitors and nucleoside polymerase inhibitors in development. We believe that the future evolution of HCV therapy will likely include protease inhibitors, nucleosides and non-nucleosides used in various combinations and potential additional mechanisms such as cyclophilin inhibitors and NS5A inhibitors. Therefore, we view ANA598 as complementary to, rather than competitive with, protease inhibitors and nucleosides that are currently in development as HCV therapies.

Preclinical evaluation of ANA598 required for initiation of clinical investigation was completed in the first quarter of 2008, leading to submission of an Investigational New Drug application (IND) to the U.S. Food and Drug Administration (FDA), subsequent allowance of the IND by the FDA and initiation of clinical investigation in the second quarter of 2008. In December 2008, we announced that the FDA had granted fast track designation to ANA598 for the treatment of chronic HCV infection. We have completed three Phase I studies of ANA598 that have demonstrated potent antiviral activity and good tolerability and are nearing conclusion of a Phase IIa study in which ANA598 was dosed in patients for 12 weeks in combination with pegylated interferon-alfa and ribavirin, which is the current standard of care (SOC) for the treatment of hepatitis C. In January 2011, we initiated a Phase IIb study of ANA598 in combination with SOC in which ANA598 will be dosed for 28 or 48 weeks.

In the Phase IIb study, approximately 200 chronically infected genotype 1 hepatitis C patients are to receive ANA598 200 mg twice-daily (bid) in combination with SOC, with a loading dose of 800 mg bid of ANA598 day one. In addition, approximately 66 chronically infected genotype 1 hepatitis C patients are to receive placebo added to SOC. Enrollment is expected to include approximately equal numbers of treatment-naïve (previously untreated) patients and treatment-experienced patients who have failed a prior course of pegylated interferon and ribavirin, including difficult to treat prior null-responders. Treatment duration for naïve patients will be response-guided, with patients being dosed for either 28 or 48 weeks, while treatment-experienced patients are to receive all three agents for 48 weeks. While

HCV patients who respond quickly to dual or triple therapy may largely be treated with a treatment duration of six months in the future, we believe there will remain a significant population for harder to treat patients in whom viral load decline is slower. We believe these patients may benefit from extended treatment with ANA598 through 48 weeks. The Phase IIb trial design is intended to further define patient populations suitable for shortened therapy and populations who may benefit from extended therapy. We expect to receive viral response data through 24 weeks of treatment prior to the end of 2011. We are conducting the study at a number of sites within and outside of the United States.

We are nearing conclusion of a Phase IIa study of ANA598 in combination with SOC for the treatment of hepatitis C. In this study, ANA598 was dosed with SOC, after which patients continued to receive SOC alone. Dosing of ANA598 was completed in 2010 and we are currently in the follow-up stage of collecting SVR data. In the Phase IIa study, treatment-naïve genotype 1 patients received ANA598 or placebo in combination with SOC for 12 weeks at dose levels of 200 mg bid or 400 mg bid, each with a loading dose of 800 mg bid on day one. Patients who achieved undetectable levels of virus at weeks four and 12 were randomized to stop all treatment at week 24 or 48. Patients are then measured 12 weeks and 24 weeks after all treatment is ended to determine their hepatitis C virus (HCV) levels. Those who show undetectable levels of virus 24 weeks after cessation of all treatment are deemed to have achieved a Sustained Virologic Response (SVR or SVR24), recognized as a viral cure. Those patients who show undetectable levels of virus 12 weeks following cessation of treatment are deemed to have achieved a sustained virologic response as of week 12 (SVR12), which is recognized within the HCV community as having significant predictive effect of achieving SVR24. The primary endpoint of the study is the proportion of patients who achieve undetectable levels of virus at week 12 (defined as cEVR). Additional endpoints include safety and tolerability as well as the proportion of patients with undetectable levels of virus at week four (defined as RVR). Approximately 90 patients participated in the Phase IIa study — with approximately 30 patients receiving ANA598 and 15 receiving placebo at each dose level. The study is being conducted at a number of clinical sites in the United States.

In May of 2010 we announced antiviral response, safety and tolerability results through 12 weeks from the Phase IIa study. The data showed that ANA598 added to SOC accelerated the rate of viral clearance, with comparable response at ANA598 doses of 200 mg bid and 400 mg bid. At the 200 mg bid dose level, 73% of patients receiving ANA598 in combination with SOC achieved undetectable levels of virus (<15 IU/ml) at week 12, referred to as cEVR. At the 400 mg bid dose level, the cEVR rate was 75% and for the control arm the cEVR rate was 63%.

Antiviral Response Through 12 Weeks

Proportion of Patients (%) with Undetectable Levels of Virus (<15 IU/mL) by Week

	<u>Week 1</u>	<u>Week 2</u>	<u>Week 3</u>	<u>Week 4</u>	<u>Week 6</u>	<u>Week 8</u>	<u>Week 10</u>	<u>Week 12</u>
ANA598 + SOC 200 mg bid	11	22	44	56	65	69	73	73
ANA598 + SOC 400 mg bid	9	27	30	42	56	72	75	75
Placebo + SOC	0	3	9	13	19	38	48	63

One patient who received ANA598 400 mg bid experienced viral breakthrough (defined as a confirmed increase of >1 log from any prior measurement) between weeks 10 and 12. No other patient who received either dose of ANA598 experienced viral breakthrough while receiving ANA598.

In 2009, a genetic marker in patients was discovered that predicts response to SOC. Recent scientific studies have shown that individuals with the IL28B CC genotype, which is estimated to be present in approximately 37% of Caucasian HCV patients and a lower percentage of patients in other ethnic groups, are substantially more responsive to SOC than patients with other IL28B genotypes. This industry knowledge became available after the ANA598 Phase IIa study was designed and initiated and so patients were not stratified based on IL28B genotype in the study. Subsequently, we determined the available patients' IL28B genotypes. In the SOC control arm of the Phase IIa study, 46% of the patients who were genotyped were of the CC genotype, while in the ANA598-treated arms only 22% of the patients who were genotyped were of the CC genotype. These numbers are based on the assessment of IL28B genotyping from approximately 81% of the patients in the Phase IIa study. We believe that the high proportion of CC patients in the SOC control arm relative to the overall population may have contributed to a higher cEVR rate in the control arm than has been seen historically with interferon and ribavirin.

As reported during 2010, our analysis of the available IL28B genotype information has led to a further understanding of ANA598's potential for beneficial effect on HCV patients regardless of IL28B genotype. The IL28B marker is represented in the human population as one of three values — CC, CT or TT. As described above, it has been determined that patients with the CC marker have a much faster antiviral response to SOC over 12 weeks than patients with CT or TT, who are collectively grouped as non-CC. Within the context of response-guided therapy, which is expected to become standard if and when DAAs are approved, patients with faster antiviral response could be candidates for successful treatment with a six-month treatment course instead of the standard twelve-month course, thereby eliminating the tolerability and cost burdens of the second six months of pegylated interferon and ribavirin treatment. Data generated from the ANA598 Phase IIa study demonstrated that adding ANA598 to SOC accelerated the antiviral response in both CC and non-CC patient types.

Also during 2010, we reported the safety and tolerability results from the ANA598 Phase IIa study. Both doses of ANA598 demonstrated a favorable safety and tolerability profile through 12 weeks, although conclusions regarding safety and tolerability cannot be made until results in more patients over longer duration are known. Safety laboratory values were comparable between the ANA598 and control arms. At the 200 mg bid dose level, the incidence of all adverse events was similar between the active and control arms, with reported adverse events being typical for patients treated with interferon and ribavirin. In the 400 mg bid arm, a higher incidence of rash was seen relative to the 200 mg bid and control arms. The incidence of all other adverse events was comparable between the 400 mg bid and control arms. In the 400 mg bid arm, 62% of patients receiving ANA598 developed rash, compared to 41% of patients that received 200 mg bid and 34% of patients that received placebo plus SOC. In the 400 mg bid group, 17 of 21 rashes were mild, with one grade 2 rash and three grade 3 rashes. In the 200 mg bid arm, the incidence of rash was comparable with the placebo control arm and also consistent with historical reports of rash incidence due to interferon and ribavirin alone. The rashes that were classified as grade 3 were done so due to the extent of body surface covered by the rash, which was maculopapular in nature (red spots, some raised). In the 200 mg bid arm, one patient in the ANA598 group experienced a grade 3 rash which began resolving rapidly upon stopping all study medication. Per protocol, this patient resumed interferon/ribavirin alone and continued in the study. In the 400 mg bid arm, four patients discontinued ANA598 due to rash; three with grade 3 rash and one with grade 1 rash.

We are encouraged by the preliminary SVR data from the Phase IIa study. In the 200 mg bid cohort, six patients who received ANA598 were randomized to stop all treatment at week 24. We have analyzed the HCV level data measured 24 weeks after all treatment was ended for four of these six patients. This data shows that all four of these patients achieved SVR24. A fifth patient in this group, who was previously reported to have achieved SVR12, was determined to have continued receiving SOC past week 24 due to an error in duration of administration at a clinical site. This patient has maintained undetectable levels of virus through week 48, but this response is now properly characterized as undetectable levels of virus at end-of-treatment. We have not yet assessed achievement of SVR24 for the final patient in this first group.

In the 400 mg bid cohort, seven patients who received ANA598 were randomized to stop all treatment at week 24. We currently have data on the HCV levels for six of these seven patients, measured 12 weeks after all treatment was ended. This data shows that three out of the six reported patients achieved SVR12, while three did not. Based on our initial analysis of the data from this group, it appears that the three patients who did not achieve SVR12 had low levels of ribavirin at week four of the study. Industry literature references regarding HCV therapy have reported that patients who have low levels of ribavirin early in the treatment regimen are less likely to achieve a sustained virologic response after completion of therapy, despite achieving undetectable levels of virus while on therapy. This phenomenon is well recognized within the HCV community as the unexplained positive effect of ribavirin, which is necessary in the large majority of patients in order to achieve an SVR after having achieved undetectable levels of virus during treatment. We believe that this

phenomenon was a contributing factor leading to the failure of these three patients to achieve SVR12. We have not yet assessed achievement of SVR12 for the last patient in this group.

We intend to analyze the remaining SVR data from the ANA598 Phase IIa study after all patients have been off therapy for 24 weeks, which we expect to occur in the summer of 2011. We plan to analyze the entire data set at that time and potentially submit the data for presentation at a medical conference. We cannot guarantee that the remaining SVR data will be as favorable as the data we have seen to date.

Previously, we conducted three Phase I studies of ANA598 that led to Phase II development.

We have presented pre-clinical data showing enhanced antiviral activity and suppression of resistance when ANA598 is combined *in vitro* with other anti-HCV agents that act through diverse mechanisms, including protease inhibition, polymerase inhibition (both nucleoside and complementary non-nucleoside inhibitors), NS5A inhibition, and cyclophilin inhibition, as well as interferons. In particular, we have presented *in vitro data* showing that combinations of ANA598 with either the protease inhibitor telaprevir, the nucleoside polymerase inhibitor PSI-6130 (the prodrug of RG-7128), an NS5A inhibitor or interferon-alfa appear to be synergistic whereas other combinations are additive. Synergistic means that the actual combined effect of the two agents is greater than would be predicted from simply adding the effects of each agent alone. The combination of ANA598 with any one of these agents has demonstrated the ability *in vitro* to eliminate virus that is resistant to any single therapeutic agent. These studies also show that ANA598 retained activity *in vitro* against mutants known to confer resistance to other classes of DAAs, including protease inhibitors, nucleoside inhibitors and non-nucleosides that, through virtue of binding at a different site than ANA598, display a resistance profile distinct from that of ANA598. We also showed that genotypic mutations resistant to ANA598 appear to be fully susceptible to interferon-alfa, telaprevir and PSI-6130. Previously, we have also presented data demonstrating synergy between ANA598 and immunoregulatory proteins termed “cytokines” induced by ANA773, Anadys’ TLR7 agonist oral prodrug.

ANA773 for HCV

Because interferon-alfa is the foundation of the current standard of care for hepatitis C and the current approval strategies of DAAs are based on the addition of such direct antivirals to interferon-based regimens, we believe that an oral agent that stimulates interferon production with improved tolerability could potentially displace interferon from future regimens that contain direct antivirals. We believe that ANA773 may offer the opportunity to be such an oral interferon replacement.

In 2009 we concluded a Phase I clinical trial of ANA773 in HCV patients. In the first three cohorts of the patient portion of this trial, HCV patients received oral ANA773 or placebo at every other day over 28 days, at doses of 800 mg, 1200 mg or 1600 mg, with six subjects receiving ANA773 and two receiving placebo in each

cohort. At these doses, data showed an encouraging trend toward viral load reduction. We then amended the protocol to provide for a higher dose. In this final cohort of the trial, in which patients received 2000 mg of ANA773 every other day over 10 days, the mean maximal decline in viral load was 1.3 log₁₀, compared to a mean maximal decline of 0.3 log₁₀ in patients who received placebo. Five of the eight patients who received 2000 mg ANA773 experienced a maximal decline of greater than 1 log, while none of the eight patients who received placebo experienced a decline of greater than 1 log. The mean end-of-treatment decline was 0.6 log₁₀ in patients who received 2000 mg ANA773 compared to 0.1 log₁₀ in patients who received placebo. ANA773 was well-tolerated in patients throughout the course of the study and there were no serious adverse events reported.

Results from pre-clinical pharmacology studies showed that ANA773 elicited desired immune responses and that the profile of response could be modulated by both dose and schedule of administration. Results of 13-week GLP toxicology studies showed that with every-other-day dosing of ANA773, immune stimulation of a magnitude believed to confer therapeutic potential could be achieved without adverse toxicology findings. The immune stimulation observed with every-other-day dosing of ANA773 in monkeys included induction of interferon- α and interferon dependent responses at levels that were sustained over 13 weeks of dosing.

In the fall of 2010 we decided to resume clinical investigation of ANA773 in HCV. We are preparing to conduct a 28 day combination study of ANA773 with ribavirin. If supported by the data from the first cohorts utilizing ANA773 and ribavirin only, this study may also include additional cohorts in which ANA773 will be tested as a triple combination with ribavirin and a DAA, to parallel the likely future use of interferon. We intend to conduct this study in Europe and potentially other countries, and we expect that up to approximately 75 patients will participate in the trial, inclusive of the DAA cohorts. We expect to receive four week data from the first two cohorts of ANA773 plus ribavirin in this study during the fourth quarter of 2011.

Manufacturing and Supply

All of our manufacturing is out-sourced to third parties, with control by our internal managers. We rely on third-party manufacturers to produce sufficient quantities of ANA598 and ANA773 for use in clinical trials. We intend to continue this practice for any future clinical trials and large-scale commercialization of ANA598 and/or ANA773. Both ANA598 and ANA773 are small-molecule drugs. Historically, these drugs have been simpler and less expensive to manufacture than biologic drugs.

Intellectual Property

Our policy is to pursue patents and to otherwise endeavor to protect our technology, inventions and improvements that are commercially important to the development of our business. We also rely upon trade secrets that may be important to the development of our business.

Our success will depend in large part on our ability to:

- Obtain and maintain patent and other proprietary protection for the technology, inventions and improvements we consider important to our business;
- Defend and enforce our patents;
- Preserve the confidentiality of our trade secrets; and
- Operate without infringing the patents and proprietary rights of third parties.

We hold issued patents and pending patent applications in the United States and in foreign countries we deem appropriate, covering intellectual property developed as part of our research and development programs. Our intellectual property holdings as of December 31, 2010, include, but are not limited to, the United States and foreign patents and patent applications described below.

In our HCV non-nucleoside polymerase program, we hold three issued United States patents related to our ANA598 program (patent numbers 7,462,611; 7,582,754; and 7,842,838) with expiration dates in 2027 and 2028, one issued patent in Singapore expiring in 2027, one issued patent in each of Malta and Lebanon expiring in 2028, and 62 pending United States and/or foreign patent applications (in Australia, Brazil, Canada, China, the European Patent Convention, India, Japan, Mexico, Taiwan and certain other foreign jurisdictions) covering ANA598 and/or other non-nucleoside NS5B polymerase inhibitor compounds and the manufacture, pharmaceutical compositions, and methods of use of these compounds.

In our ANA773 program, we hold three issued United States patents (patent numbers 7,560,544; 7,709,448; and 7,781,581) with expiration dates in 2026, 2027 and 2028, two issued patents in Malta with expiration dates in 2025 and 2027, one issued patent in each of Belarus, Eurasia, New Zealand, Russian Federation, Singapore, and Ukraine expiring in 2025, one issued patent in each of France, Germany, Italy, Netherlands, Spain, Switzerland and the United Kingdom expiring in 2026, and 77 pending United States and/or foreign patent applications (in Australia, Brazil, Canada, China, the European Patent Convention, India, Japan, Mexico, Taiwan and certain other foreign jurisdictions) covering ANA773 and related compounds and prodrugs, and the manufacture, pharmaceutical compositions, and methods of use of these compounds.

We also hold two United States patents (patent numbers 7,576,068 and 7,858,637) with expiration dates in 2024 and 2026, one issued patent in each of Australia, New Zealand, Mexico, Morocco and Georgia expiring in 2024, one issued patent in each of France, Germany, Italy, Netherlands, Spain, Switzerland and the United Kingdom expiring in 2024, and 10 pending United States and/or foreign patent applications (in Brazil, Canada, China, Japan, Taiwan and certain other foreign jurisdictions) that relate to methods of use of certain TLR7 agonists and TLR7 agonist prodrugs. In addition, we hold patents and patent applications in the United States and foreign countries covering composition of matter and methods of use of certain other TLR7 agonists and TLR7 agonist prodrugs, with patent expiration dates beginning in 2022.

We intend to continue using our scientific expertise to pursue and file patent applications on new developments with respect to uses, methods and compositions of matter in order to enhance our intellectual property position in our areas of therapeutic focus.

We intend to aggressively prosecute our patent applications and enforce and defend our patents and otherwise protect our proprietary technology. Although we believe our rights under patents and patent applications provide a competitive advantage, the patent positions of pharmaceutical and biotechnology companies are highly uncertain and involve complex legal and factual questions. We may not be able to develop patentable products or processes, and may not be able to obtain patents from pending applications. Even if patent claims are allowed, the claims may not issue, or in the event of issuance, may not be sufficient to protect the technology owned by or licensed to us. Any patents or patent rights that we obtain may be circumvented, challenged or invalidated by our competitors.

We also rely on trade secrets and proprietary know-how, especially when we do not believe that patent protection is appropriate or can be obtained. Our practice is to require our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to execute confidentiality agreements upon the commencement of employment or other relationships with us. These agreements generally provide that all confidential information developed by or made known to the individual during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties. In the case of employees, the agreements generally provide that all discoveries, developments, inventions and other intellectual property conceived or reduced to practice by the individual while employed by us will be our exclusive property. In the case of advisors and consultants, the agreements generally provide that all discoveries, developments, inventions, and other intellectual property conceived or reduced to practice by the individual as a result of performance of services for us and not resulting from research related to work supported by another entity with which the individual is party to a confidentiality agreement, shall be our exclusive property. These agreements may not effectively prevent disclosure of confidential information nor result in the effective assignment to us of intellectual property, and may not provide an adequate remedy to us in the event of unauthorized disclosure of confidential information or other breaches of the agreements.

Competition

The biotechnology and pharmaceutical industries are very competitive and subject to rapid and significant technological change. Our product candidates, if approved for sale, will compete with existing therapies. In addition, a number of companies are pursuing the development of therapies for hepatitis C. We believe that a significant number of drugs are currently under development and may become available in the future for the treatment of HCV. Due to the level of focus on developing treatments for this indication, ongoing research efforts are intense and new treatments are being sought out and developed by our competitors. Some of these

products use therapeutic approaches that may compete directly or indirectly with ANA598 or ANA773. In addition, less expensive generic forms of currently marketed drugs could lead to additional competition upon patent expiration or invalidations.

HCV

Treating HCV with Interferon-based Therapies

Current standard treatments for HCV include an interferon-based product combined with ribavirin. Although interferons result in antiviral effects, they are thrice-weekly injectable products and cause numerous side effects. Next generation interferon-based products, so-called pegylated interferons, were developed to provide an improved dosing regimen and are approved as once-per-week injected products. Currently approved therapies for the treatment of HCV infection include Peg-Intron (pegylated interferon-alfa-2b) and Intron-A (interferon-alfa-2b), which are marketed by Merck, Pegasys (pegylated interferon-alfa-2a) and Roferon-A (interferon-alfa-2a), which are marketed by Roche and several branded and generic versions of ribavirin.

Many patients experience unpleasant side effects when receiving interferon-based products, including flu-like symptoms such as fatigue, pyrexia, myalgia, cough, headache, and rigors, psychiatric reactions, such as depression, irritability and anxiety, as well as neutropenia and thyroid dysfunction. Due to the nature of HCV infection, a majority of patients do not show any symptoms from the disease. Ironically, the harsh side effects associated with the current treatment regimen often make patients feel sicker than the disease itself. As a result, physicians often delay treatment of HCV-infected patients until tests of liver function demonstrate initial liver degeneration due to the infection. In clinical studies, harsh side effects have caused discontinuation of treatment in approximately 10 to 20 percent of patients. Some of these side effects may also require additional drug therapies, which increase the cost to the patient. Further, the optimal dose, treatment length and response rates to interferon and ribavirin therapy vary considerably based on HCV genotype and mode of therapy, i.e., monotherapy or combination therapy.

Direct Antivirals in Development for Treating HCV

In response to the limitations of existing treatments for HCV infection, companies are developing direct-acting antivirals (DAAs) for use in combination with the current treatment regimen of interferon and ribavirin. Two DAAs, both protease inhibitors are currently under review by the FDA for regulatory approval; telaprevir developed by Vertex in collaboration with Tibotec (Janssen Pharmaceutica/Johnson & Johnson) and Mitsubishi-Tanabe Pharma and boceprevir developed by Merck. Unlike interferons, which work by stimulating the immune system's response to viral infection, HCV DAAs inhibit viral replication by targeting viral proteins essential for replication: the protease, polymerase or NS5A region of the virus. Accordingly, DAAs when added to the current standard of care may significantly improve treatment outcomes in difficult to treat patients such as those infected with HCV genotype 1. The addition of DAAs to the current standard of care could also lead to shorter treatment duration, which could increase patient compliance. While DAAs will likely

initially be used in combination with pegylated interferon-alfa and ribavirin, it may be possible to eventually replace one or both of these agents with a combination of DAAs. This would allow for an all oral-based treatment regimen for HCV that eliminates the untoward side effects associated with interferon-alfa treatment.

ANA598 belongs to a class of DAAs known as non-nucleoside polymerase inhibitors. If approved, ANA598 would likely be used in combination with the current standard of care and/or other DAAs, such as protease inhibitors, other polymerase inhibitors, or NS5A inhibitors. ANA598 may also be combined with cyclophilin inhibitors whose action is mediated via inhibition of a host (human) enzyme. Although any product currently approved or approved in the future for the treatment of HCV infection could potentially decrease or eliminate the commercial opportunity of ANA598, we expect that in a combination setting a non-nucleoside polymerase inhibitor would be complementary with a protease inhibitor, a nucleoside polymerase inhibitor, NS5A inhibitor and cyclophilin inhibitors. We believe that other non-nucleoside polymerase inhibitors would likely be the most direct competitors of ANA598, but depending on the resistance profiles of the compounds, it is possible that even two non-nucleoside polymerase inhibitors could be complementary. To our knowledge, the following non-nucleoside polymerase inhibitor programs are currently under clinical evaluation: filibuvir by Pfizer, GS-9190 by Gilead, TMC-647055 by Tibotec/Johanson & Johnson (Janssen), ABT-072 and ABT-333 by Abbott, BI-207127 by Boehringer Ingelheim, BMS-791325 by Bristol-Myers Squibb, IDX-375 by Idenix, and VX-222 by Vertex. Further, a number of companies have non-nucleoside polymerase inhibitor research and pre-clinical development programs.

Additional late stage DAAs in clinical development for HCV that may be complementary to or competitive with ANA598 include: the protease inhibitors telaprevir, in development by Vertex Pharmaceuticals, Tibotec (Janssen Pharmaceutica/Johanson & Johnson) and Mitsubishi Tanabe Pharma; boceprevir, in development by Merck; danoprevir, in development by Roche; TMC-435350, in development by Tibotec (Janssen Pharmaceutica/Johanson & Johnson) and Medivir and BMS-650032, in development by Bristol-Myers Squibb; as well as, BI-201335, in development by Boehringer Ingelheim; the nucleoside polymerase inhibitors RG7128, in development by Roche; and PSI-7977 in development by Pharmasset; and the NS5A inhibitor BMS-790052, in development by Bristol-Myers Squibb. Cyclophilin inhibitors, such as DEB-025, in development by Novartis may also be competitive with ANA598.

Immunological Agents in Development for Treating HCV

Due to the side effects and poor treatment response to interferon therapy discussed above, there are currently a number of agents in development that could potentially replace today's pegylated interferons. ANA773 is an oral prodrug of a TLR7 agonist that we have evaluated for the treatment of HCV. There are a number of agents in clinical development that could potentially compete with ANA773 as a new agent for the treatment of HCV, including Locteron, in development by Biolex Therapeutics and Omega DUROS interferon (ITCA-638) in development by Intarcia Therapeutics, both of which are longer-acting versions of interferon alfa. Also, in

development as potential improvements to existing interferons are PEG-Interferon Lambda, in development by Bristol Myers-Squibb, IMO-2125, a TLR9 agonist in development by Idera, and SD-101, a TLR9 agonist in development by Dynavax Technologies, each of which is currently being studied in early stage clinical trials in HCV patients. In addition, Gilead has advanced GS-9620, a TLR7 agonist into a Phase I clinical trial in HCV patients.

Competitive Risks

We are in the early stages of a Phase IIb study of ANA598, which was initiated following completion of three short term Phase I studies and a nearly concluded Phase IIa study in which ANA598 was dosed in combination with standard of care for 12 weeks, and we have only conducted short term Phase I studies of ANA773. Therefore, it is difficult to predict the efficacy, safety and tolerability that these product candidates will demonstrate in longer term trials, alone or in combination with other agents. It is also difficult to predict how these product candidates will interact with other product candidates in development or on the market, until we perform combination studies. Further, it is difficult to predict whether our product candidates will cause any toxicity issues, potential side effects, or other negative consequences associated with their long-term use. During the course of future clinical trials, we may discover that these product candidates are less effective, require unacceptable dosing regimens, or have a similar side effect profile as the profile associated with current therapies or future competitors. This may result in our product candidates being less advantageous or less desirable from a patient and treating physician perspective as compared to current or alternative therapies for HCV.

We face competition from pharmaceutical and biotechnology companies both in the U.S. and abroad. Our competitors may utilize discovery technologies and techniques or partner with collaborators in order to develop products more rapidly or successfully than we or our future collaborators are able to do. Many of our competitors, particularly large pharmaceutical companies, have substantially greater financial, technical and human resources than we do and far more experience in the development of product candidates and the commercialization of potential products. In addition, academic institutions, government agencies, and other public and private organizations conducting research may seek patent protection with respect to potentially competitive products or technologies. These organizations may also establish exclusive collaborative or licensing relationships with our competitors.

We believe that our ability to compete depends, in part, upon our ability to create, maintain and license scientifically advanced technology. Further, we need to attract and retain qualified personnel, obtain patent protection or otherwise develop proprietary technology or processes and secure sufficient capital resources for the substantial time period between technological conception and commercial sales of products based upon our technology.

We expect that competition among HCV therapies approved for sale will be based on various factors, including improved product efficacy, safety and tolerability, resistance profiles, ease of administration (*e.g.*, oral vs. intravenous administration),

availability, price, reimbursement status and patent position. Potential competitors may develop treatments for HCV that are more effective and/or safer or more convenient than our product candidates or that would make our technology and product candidates obsolete or non-competitive.

Government Regulations

We are subject to regulation by the FDA and comparable regulatory agencies in foreign countries with respect to the development and commercialization of products and services resulting from our drug discovery activities. These agencies and other federal, state and local entities regulate research and development activities and the testing, manufacture, quality control, safety, efficacy, labeling, storage, record keeping, advertising and promotion of these products and services.

As an initial step in the drug approval process of pharmaceuticals, an applicant typically conducts preclinical laboratory and animal studies of the product candidate. Following these studies, the applicant will submit an IND (or equivalent) application to the FDA (or comparable foreign regulatory agency). Once the IND becomes effective, the applicant can commence clinical studies of the product candidate in humans to determine safety, tolerability and efficacy. Following clinical studies, the marketing of a new drug requires the filing of a New Drug Application (NDA) with the FDA and its subsequent approval (similar requirements exist within foreign agencies). The process required by the FDA and comparable agencies before a pharmaceutical or biologic device may be marketed in the U.S. or in any other country generally requires many years and substantial effort and financial resources, and approval from the FDA may not be received in a timely manner, if at all. The time required to satisfy FDA requirements or similar requirements of foreign regulatory agencies may vary substantially based upon the type, complexity and novelty of the product or the targeted disease. Even if a product receives regulatory approval, later discovery of previously unknown problems with a product may result in restrictions on the product or even complete withdrawal of the product from the market.

Under the FDA's regulations, the clinical testing program required for marketing approval of a new drug typically involves three sequential phases, which may overlap.

- *Phase I:* Studies are conducted on normal, healthy human volunteers or patients to determine safety, dosage tolerance, absorption, metabolism, distribution and excretion. If possible, Phase I studies may also be designed to gain early evidence of effectiveness.
- *Phase II:* Studies are conducted on small groups of patients afflicted with a specific disease to gain preliminary evidence of efficacy, to determine the common short-term side effects and risks associated with the substance being tested and to determine dosage tolerance and optimal dosage.
- *Phase III:* Involves large-scale studies conducted on disease-afflicted patients to provide statistical evidence of efficacy and safety and to provide an adequate basis for physician labeling.

Frequent reports are required in each phase, and, if unwarranted hazards to subjects are found, the FDA may request modification or discontinuance of clinical testing until further preclinical testing is conducted. Additional testing (Phase IV) may be conducted after FDA approval for marketing is granted and could be designed to evaluate alternative utilizations of drug products prior to their being marketed for such additional utilizations as well as to test for complications resulting from long-term exposure not revealed in earlier clinical testing.

Environmental and Safety Matters

Certain of our development activities involve the controlled use of biological, hazardous and radioactive materials and waste. We are also subject to numerous federal, state and local environmental and safety laws and regulations, including those governing the use, manufacture, storage, handling and disposal of hazardous materials and waste products. The cost of compliance with and any violation of these regulations could have a material adverse effect on our business and results of operations. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards prescribed by state and federal regulations, we cannot assure investors that accidental contamination or injury from these materials will not occur.

To date, compliance with laws and regulations relating to the protection of the environment has not had a material effect on our capital expenditures or our competitive position. However, we are not able to predict the extent of government regulation, and the cost and effect thereof on our results of operations, which might result from any legislative or administrative action pertaining to environmental or safety matters. In the event of contamination or injury, we could be held liable for substantial damages or penalized with fines in an amount exceeding our resources, and our clinical trials could be suspended. In addition, we may have to incur significant costs to comply with future environmental laws and regulations.

Research and Development Expenses

Research and development expenses consist primarily of costs associated with the discovery, preclinical and clinical development of our product candidates. Research and development expenses are the primary source of our expenses and totaled \$12.0 million, \$19.5 million and \$26.0 million for the years ended December 31, 2010, 2009 and 2008, respectively.

Employees

As of March 1, 2011, we had 24 regular, full-time employees and three other employees, including 16 in research and development, and the balance in general and administrative positions, with 14 of our employees holding Ph.D., M.D. or other advanced degrees. None of our employees is represented by a labor union, and we consider our employee relations to be good.

Executive Officers of the Registrant

The following table sets forth information regarding our executive officers as of March 1, 2011:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Steve Worland, Ph.D.	53	President and Chief Executive Officer
James L. Freddo, M.D. . . .	56	Senior Vice President, Drug Development and Chief Medical Officer
Kevin L. Eastwood	47	Senior Vice President, Corporate Development
James Appleman, Ph.D. . .	54	Senior Vice President, Research and Chief Scientific Officer
Elizabeth E. Reed, J.D. . . .	40	Senior Vice President, Legal Affairs and General Counsel
Peter T. Slover, CPA	36	Vice President, Finance and Operations

Steve Worland, Ph.D. was appointed President and Chief Executive Officer and a member of the Board of Directors in 2007. Dr. Worland joined Anadys in 2001 as Chief Scientific Officer and served as President, Pharmaceuticals prior to being named CEO. Prior to joining Anadys, Dr. Worland was Vice President, Head of Antiviral Research at Agouron Pharmaceuticals, a Pfizer Company. Dr. Worland was at Agouron from 1988 through the acquisition of Agouron by Warner-Lambert in 1999, where he held various positions and responsibilities that culminated with him assuming global responsibility for anti-infective strategy as Vice President for Warner-Lambert. At Agouron, Warner-Lambert and Pfizer, Dr. Worland led teams responsible for discovery and clinical development in the areas of HIV, HCV and respiratory infections. Dr. Worland was a National Institutes of Health Postdoctoral Fellow in Molecular Biology at Harvard University from 1985 to 1988. He received his B.S. with highest honors in Biological Chemistry from the University of Michigan and his Ph.D. in Chemistry from the University of California, Berkeley.

James L. Freddo, M.D. was appointed a member of the Board of Directors in January 2011 and has served as Senior Vice President, Drug Development and Chief Medical Officer since July 2008. Prior to joining Anadys in July 2006, Dr. Freddo was Vice President, Clinical Site Head and Development Site Head, Pfizer Global Research and Development, La Jolla. Previously at Pfizer, he was Executive Director, Site Therapeutic Area Leader, Clinical Development, Oncology. While at Pfizer, Dr. Freddo led the team responsible for the registration of Sutent® (sunitinib malate), a drug approved by the FDA in January 2006 for treating advanced kidney cancer and gastrointestinal stromal tumors. Prior to Pfizer, Dr. Freddo held a variety of senior management positions at Wyeth-Ayerst Research from December 1996 until June 2002, including Senior Director, Oncology, Senior Director, Infectious Diseases, and Senior Director, Transplantation Immunology. Dr. Freddo currently serves as a member of the Board of Directors of InfuSystem Holdings, Inc., a healthcare services

company. He holds a B.S. degree in Medical Technology from the State University of New York at Stony Brook, and a M.D. degree from the University of North Carolina, where he also completed his fellowship training.

Kevin L. Eastwood joined us in January 2011 as Senior Vice President, Corporate Development. Prior to joining Anadys, Mr. Eastwood was Vice President, Corporate Development at Ambrx, Inc. from May 2006 to December 2010, Senior Vice President, Business Development at Achillion Pharmaceuticals, Inc. from June 2000 to May 2006 and Senior Manager, Business Development at Agouron Pharmaceuticals, Inc. from August 1997 to June 2000. In these positions, Mr. Eastwood was responsible for executing business transactions with a number of leading biotechnology and pharmaceutical companies, including Pfizer, Inc., Merck and Co., Inc., Eli Lilly and Co., and Gilead Sciences. Mr. Eastwood began his pharmaceuticals career in sales and marketing at Marion Laboratories and transitioned to business development while at Agouron. He received a B.S. degree in Biology from Missouri State University.

James Appleman, Ph.D. was named Senior Vice President, Research and Chief Scientific Officer in January 2011. Dr. Appleman joined us in 2001 and has held several positions of increasing responsibility with us including Senior Vice President, Research in 2010, Vice President, Research in 2009, Vice President, Biology from February 2007 to 2009 and Senior Director of Project Management and Planning from 2005 to February 2007, as well as earlier positions. Prior to joining Anadys, Dr. Appleman was a faculty member at St. Jude Children's Research Hospital and subsequently held positions at Gensia, Inc., a biopharmaceutical company and Metabasis, a biopharmaceutical company. Dr. Appleman received a Ph.D. in Biochemistry from Oklahoma State University and completed his postdoctoral training at Dartmouth Medical School.

Elizabeth E. Reed, J.D. has served as our Senior Vice President, Legal Affairs and General Counsel since August 2009. Ms. Reed joined us in 2001 and has served as our Corporate Secretary since January 2002. Previously, Ms. Reed served as our Vice President, Legal Affairs from December 2006 to August 2009, as our Senior Director, Legal Affairs from December 2002 to December 2006 and as our Director of Legal Affairs from October 2001 to December 2002. Prior to joining us, Ms. Reed was associated with the law firms of Cooley Godward LLP and Brobeck, Phleger & Harrison LLP. Ms. Reed is a member of the State Bar of California and received her B.S. in Business Administration with an emphasis in finance from the Haas School of Business at the University of California, Berkeley and holds a J.D., cum laude, from Harvard Law School.

Peter T. Slover has served as our Vice President, Finance and Operations since July 2009. Mr. Slover joined us in 2004 as Manager of Financial Reporting and served in this position through December 2005. From January 2006 to July 2006, Mr. Slover served as the Company's Senior Manager, Financial Reporting and Internal Controls, from August 2006 to December 2006 as our Associate Controller, from January 2007 to December 2008 as our Controller and from January 2009 to July 2009 as our Senior Director, Finance and Corporate Controller. Prior to joining the Company, Mr. Slover

began his career as an auditor at KPMG LLP where he spent seven years in public accounting. Mr. Slover is a licensed Certified Public Accountant in the State of California. Mr. Slover received a B.S. degree in Business Administration from Shippensburg University.

Company Website

We file annual, quarterly, current reports, proxy statements and other information with the Securities and Exchange Commission. Our primary website can be found at <http://www.anadyspharma.com>. We make available free of charge at this website (under the “Investors — SEC Filings” caption) all of our reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, including our Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K and amendments to those reports. These reports are made available on the website as soon as reasonably practicable after their filing with, or furnishing to, the Securities and Exchange Commission. Furthermore, we also make available on our website free of charge, and in print to any shareholder who requests it, the Committee Charters for our Audit, Compensation, and Corporate Governance and Nominating Committees, as well as the Code of Business Conduct and Ethics that applies to all directors, officers and employees of the Company. Amendments to these documents or waivers related to the Code of Business Conduct and Ethics will be made available on our website as soon as reasonably practicable after their execution.

The Company was incorporated in Delaware in September 1992 as ScripTech Pharmaceuticals, Inc., and in 1994 we changed our name to Scriptgen Pharmaceuticals, Inc. In May 2000, following the addition of a substantially new management team and the infusion of new capital, product candidates and technologies, we changed our name to Anadys Pharmaceuticals, Inc.

Item 1A. Risk Factors

You should consider carefully the following information about the risks described below, together with the other information contained in this Annual Report and in our other public filings before making any investment decisions regarding our stock. If any of the following risks actually occurs, our business, financial condition, results of operations and future growth prospects would likely be materially and adversely affected. In these circumstances, the market price of our common stock would likely decline, and you may lose all or part of the money you paid to buy our common stock.

Risks Related to Our Business

Any significant set-back regarding, or the failure of, ANA598 will have a large negative impact on our business and stock price.

Currently, we are focusing most of our resources on the development of ANA598. As a result, our development portfolio entails a highly concentrated risk

of failure. If the timing or results of clinical trials and non clinical studies of ANA598 do not meet our, your, analysts' or others' expectations, the market price of our common stock could decline significantly. Any significant set-back regarding, or the failure of, ANA598 will have a significant negative impact on us and our stock price.

We may be unable to enter into future strategic or collaborative transactions, and in particular transactions around ANA598 or ANA773, on terms acceptable to us, or at all.

Our near and long-term viability will depend in part on our ability to successfully establish transactions with pharmaceutical and biotechnology companies. Since we do not currently possess the resources necessary to advance ANA598 or ANA773 fully through later stage development, we either will need to develop or acquire these resources on our own, which will require substantial funding, time and effort, or will need to enter into collaborative agreements to assist in the development of these programs. If we fail to establish collaborations or licensing arrangements on acceptable terms, we may need to forego the future development of one or both of our programs. Even if we successfully establish new collaborations, these relationships may never result in the successful development or commercialization of any product candidates or the generation of milestone, sales or royalty revenue.

In order to advance ANA598 and ANA773 through later stage development, we will require additional funds and we may not be able to obtain such funds.

Prior to advancing ANA598 and ANA773 through completion of later stage development, we will need to obtain additional funds. However, we may not be successful in obtaining such funds. Potential sources of additional funds include a new strategic alliance or other transaction, the sale of equity securities, project financing or debt financing. We cannot be sure that additional funding will be available or that such funding will be obtained on terms favorable to us or our stockholders.

We will need additional funding and may be unable to raise capital when needed, which would force us to delay, reduce or eliminate our development programs.

Our December 31, 2010 cash, cash equivalents and marketable securities balance was \$38.0 million. We believe that this balance will be sufficient to satisfy our anticipated operational cash needs for at least the next 12 months. However, we will need to seek additional funding in order to advance our programs fully through later stage development. There is no guarantee that additional funding will be available to us on acceptable terms, or at all. If funds are not available, we may be required to delay, reduce the scope of or eliminate one or both of our development programs.

In addition, we will need to raise additional capital if we choose to conduct certain activities, including:

- fund our development programs;
- acquire rights to products or product candidates, technologies or businesses;
- establish and maintain manufacturing, sales and marketing operations; and
- commercialize our product candidates, if any, that receive regulatory approval.

Our future funding requirements will depend on, and could increase significantly as a result of many factors, including:

- the progress of our clinical trials;
- the progress of our nonclinical development activities;
- our ability to establish and maintain strategic alliances;
- the costs involved in enforcing or defending patent claims and other intellectual property rights;
- the pace and timing of development activities conducted under joint development arrangements we may establish;
- the cost and timing of regulatory approvals;
- the costs of establishing or expanding manufacturing, sales and distribution capabilities;
- the costs related to development and manufacture of pre-clinical, clinical and validation lots for regulatory and commercialization of drug supply;
- the commercialization of ANA598, ANA773 and any additional products; and
- the extent to which we acquire or invest in other products technologies and businesses.

We do not anticipate that we will generate significant revenues from operations for at least several years, if ever. Until we can generate significant revenues from operations, we expect to satisfy our future cash needs through public or private equity offerings, debt financings, strategic alliances or other transactions, project financing and grant funding, as well as through interest income earned on cash balances. We cannot be certain that additional funding will be available to us on acceptable terms, or at all. If funds are not available, we may be required to delay, reduce the scope of or eliminate one or both of our development programs or our commercialization efforts.

Raising additional funds by issuing securities or through debt or project financing or strategic alliances and licensing arrangements may cause dilution to existing stockholders, restrict our operations or require us to relinquish proprietary rights.

We may seek to raise additional funds through public or private equity offerings, debt financings, project financings or strategic alliances and licensing arrangements. We cannot be certain that additional funding will be available on acceptable terms, or at all. To the extent that we raise additional capital by issuing equity securities, our stockholders' ownership will be diluted. Other financing activities may also have an equity component, which also may lead to dilution. Any debt or project financing we enter into may involve covenants that restrict our operations. These restrictive covenants may include limitations on borrowing, specific restrictions on the use of our assets as well as prohibitions on our ability to create liens, pay dividends, redeem capital stocks or make investments. In addition, if we raise additional funds through strategic alliances and licensing arrangements, it may be necessary to relinquish potentially valuable rights to our potential products or proprietary technologies, or grant licenses on terms that are not favorable to us. For example, we might be forced to relinquish all or a portion of our sales and marketing rights with respect to potential products or license intellectual property that enables licensees to develop competing products.

We are at an early stage of development, and we may never attain product sales.

Our existing organizational structure was formed in May 2000. Since then, most of our resources have been dedicated to the development of our proprietary drug discovery technologies, research and development and preclinical and early-stage clinical testing of compounds. Our current product candidates are at only the early-to-mid stages of clinical trials. ANA598, ANA773 and any other compounds that we may develop, may never be approved for commercial sales. These compounds will require extensive and costly development, preclinical testing and clinical trials prior to seeking regulatory approval for commercial sales. The time required to attain product sales and profitability is lengthy and highly uncertain, and we cannot assure you that we will be able to achieve or maintain product sales.

We expect our net losses to continue for at least several years, and we are unable to predict the extent of future losses and when we will become profitable in our business operations, if ever.

We have incurred net losses since our incorporation in 1992, and through December 31, 2010 we have an accumulated deficit of \$299.7 million. Our losses are attributable in large part to the significant research and development costs required to identify and validate potential product candidates and conduct preclinical studies and clinical trials. To date, we have generated limited revenues, consisting of one-time or limited payments associated with past collaborations or grants, and we do not anticipate generating product revenues for at least several years, if ever. We will

need to increase our operating expenses over at least the next several years in order to fund the development costs of our product candidates and further our development activities. As a result we expect to continue to incur significant and increasing operating losses for the foreseeable future. Because of the numerous risks and uncertainties associated with our research and product development efforts, we are unable to predict the extent of any future losses or when we will become profitable in our business operations, if ever. Even if we do achieve profitability in our business operations, we may not be able to sustain or increase such profitability on an ongoing basis.

The technologies on which we rely are unproven and may not result in the development of commercially viable products.

Our current product candidates, ANA598 and ANA773, were selected based on the presumption that intervention at their respective targets, HCV polymerase and TLR7, offers a therapeutic benefit. There can be no assurance that intervention at either target will offer sufficient benefit and acceptable toxicity to warrant continued development and approval. ANA773 relies on the biology of a specific receptor, or protein, named Toll-Like Receptor-7, or TLR7. However, the interaction between small molecules and TLR7 represents a relatively new mechanism of action for the treatment of disease, including HCV, and there is no guarantee that an acceptable balance between therapeutic benefit and risk will be achieved with TLR7 agonists in HCV infected patients. For example, in June 2006 we suspended dosing of ANA975, a TLR7 agonist prodrug, in our then on-going ANA975 clinical trial due to information from 13-week toxicology studies in animals that showed intense immune stimulation. We subsequently conducted additional pre-clinical studies and were unable to identify an acceptable balance between therapeutic benefit and risk using a daily dosing schedule over 13-weeks. Accordingly, we subsequently discontinued the development of ANA975 as a therapy for HCV infection. The science underlying ANA598 is also new and unproven, as no products acting at the HCV polymerase have been approved for marketing. ANA598 and ANA773 are at only the early stage to mid stage of clinical investigation. The process of successfully discovering product candidates is expensive, time-consuming and unpredictable, and the historical rate of failure for drug candidates is extremely high. If our approaches to drug discovery and development are not successful, we will not be able to establish or maintain a clinical development portfolio or generate product revenue.

Because the results of preclinical studies and early clinical trials are not necessarily predictive of future results, we can provide no assurances that ANA598 or ANA773 will have favorable results in on-going or future clinical trials, or receive regulatory approval.

Positive results from preclinical studies or early clinical trials should not be relied upon as evidence that later or larger-scale clinical trials will succeed. There is typically an extremely high rate of attrition from the failure of drug candidates proceeding through clinical trials. There is no guarantee that viral load declines or durability of response seen in early patient trials will be replicated in future trials of

longer duration and/or larger patient populations. For example, the favorable 12 week viral response data from our ANA598 Phase IIa study may not be repeated in the ANA598 Phase IIb study and may not translate into long-term benefit due to the potential emergence of resistant variants or other factors, such as low ribavirin levels in patients. Similarly, there is no guarantee that favorable safety and tolerability seen in short term studies will be replicated in studies of longer duration and/or in larger subject populations. Furthermore, if future toxicology studies have unexpected results, the clinical development of the compound at issue could be suspended, delayed and/or terminated. If ANA598 or ANA773 fails to demonstrate sufficient safety and efficacy in any clinical trial or shows unexpected findings in future toxicology studies, we would experience potentially significant delays in, or be required to abandon, development of ANA598 or ANA773. If we delay or abandon our development efforts related to ANA598 or ANA773, we may not be able to generate sufficient revenues to become profitable, and our reputation in the industry and in the investment community would likely be significantly damaged, each of which would cause our stock price to decrease significantly.

Future results of our ongoing ANA598 Phase II combination studies and results of future trials may not be as favorable as results we have seen to date.

To date, we have seen positive preliminary antiviral response and safety data in our ongoing Phase IIa combination study in which ANA598 was dosed for 12 weeks in combination with pegylated interferon and ribavirin, after which patients continued to receive pegylated interferon and ribavirin. This data includes on-treatment data showing a durable antiviral response through 12 weeks, with only a single patient (<2% of patients in the ANA598 arms) experiencing viral breakthrough while receiving ANA598 plus pegylated interferon and ribavirin. This data also includes data through 48 weeks for the 200 mg bid cohort and through 36 weeks for the 400 mg bid dose cohort. Included in the 48 week data for the 200 mg cohort is data showing that four of four patients for whom data has been analyzed who received ANA598 and were randomized to stop all therapy at week 24 maintained undetectable levels of virus 24 weeks later, referred to as achieving a Sustained Virological Response, or SVR. Included in the 36 week data for the 400 mg cohort is data showing that three of six patients for whom data is available who received ANA598 and were randomized to stop all therapy at week 24 maintained undetectable levels of virus 12 weeks later (SVR12). We believe that low ribavirin levels in the three patients who failed to achieve an SVR12 were a contributing factor to this outcome. There is no guarantee that additional data from this study, once analyzed, or data from future studies, will be as favorable, or viewed as favorably, as the data analyzed to date. The overall number of patients in this study is small, and therefore it may be difficult to assess the true impact of ANA598 based on limited SVR data. If the SVR rates from this small study are less than hoped for, or do not meet your, analysts', potential collaborators' or others' expectations, the perception of the value of ANA598 could be harmed, causing our stock price to suffer.

More generally, it remains unknown whether the favorable antiviral response and durability of response we have seen to date with ANA598 will provide sustained benefit resulting in improved SVR rates in larger studies. Also, there is no guarantee that the very low viral breakthrough rate that we have seen in the Phase IIa study will be replicated in future studies. If the results of future ANA598 studies do not show improved SVR rates over pegylated interferon and ribavirin alone and if there are no alternative paths in which ANA598 shows benefit in combination with another direct-acting antiviral, then the prospects for developing ANA598 as a competitive component of future HCV treatment could be limited.

We intend to develop ANA598 and ANA773 as components of combination treatments, which presents additional challenges to the drug development process.

We are developing ANA598 and ANA773 as potential components of future combination treatments. We may face additional challenges with this approach, as opposed to developing product candidates for monotherapy. For example, any negative properties of our product candidates may be exacerbated when combined with other agents and/or have unexpected effects in humans. Furthermore, the optimal development of our product candidates may entail explorations of combinations with other agents, which, except for drugs about to be approved, could require us to establish agreements or alliances with other companies or third parties. There is no guarantee that we will be able to enter into such alliances or agreements on terms that we view as favorable, or at all. An important element of development for an agent such as ANA598 will be to test the agent in combination with one or more other direct antivirals. In order for us to pursue this development strategy, we will need to utilize approved DAAs if available or engage the interest of other biopharmaceutical or pharmaceutical companies, since we do not have another direct antiviral to combine with ANA598. Our ability to engage this interest from other companies that have direct antivirals in development will be impacted by such companies' internal HCV portfolio dynamics, with such dynamics influencing the companies' perceived attractiveness of combining with an agent such as ANA598. For those companies that have a desire to combine with an agent such as ANA598, we will be dependent on their perception of the profile of ANA598. If they do not view the profile of ANA598 as favorably as we do, or if they establish other criteria for combination that we have not yet satisfied with ANA598, we could experience difficulties or delays in pursuing such combination trials. For example, within the HCV community to date there has been an emphasis on the genetic barrier to resistance of antiviral agents (leading to a potential conclusion that the administration of non-nucleosides is more likely to result in resistance than the administration of nucleosides due to the lower genetic barrier of resistance of nucleosides). Only more recently has there been an appreciation of the importance of a pharmacological barrier to resistance, which ANA598 exhibited in the Phase IIa combination study. Depending on other companies' perception of this issue, we could experience less enthusiasm for ANA598 as a combination partner. If we are unable to optimize the development of ANA598, our business prospects could be harmed, causing our stock price to suffer.

There is no guarantee that in future studies of ANA598, in which ANA598 will be dosed for longer duration in combination with other agents, that we will be able to identify safe and tolerable doses that result in clinical benefit, as measured by clearance of virus and durability of that clearance.

We have recently initiated a Phase IIb study in which ANA598 will be dosed for up to 48 weeks in combination with current standard of care. To date, ANA598 has not been dosed beyond 12 weeks, and there is no guarantee that the safety, tolerability or durability of response of ANA598 will be as favorable when dosed for longer durations. In addition, although we have presented *in vitro* data showing that combinations of ANA598 with current standard of care and with certain direct antiviral agents appear to be synergistic, these results may not be replicated in clinical trials. Also, it is possible that ANA598 will not be additive or synergistic with other potential components of future treatment regimens. Furthermore, it is possible that tolerability will be worse over longer durations of treatment than was seen for the same dose at a shorter duration of treatment. For example, in a 14 day healthy volunteer study conducted in 2009, three of the 24 subjects who received ANA598 discontinued from the study due to the onset of a skin rash characterized as mild to moderate with itching during the study, at comparable dose levels that were well tolerated over three days in patients. Similarly, if the tolerability of doses of ANA598 required for long-term treatment as part of future combinations is unacceptable or unfavorable relative to competitive product candidates, then the prospects for developing ANA598 as a treatment for chronic hepatitis C will be diminished, causing our stock price to decrease significantly.

Our projected development timelines for ANA598 and ANA773 are contingent, among other things, on our anticipated interactions with ex-US regulatory authorities for both programs. There is no guarantee that the ex-US regulatory authorities will allow the studies to proceed or that they will not impose requirements which could result in unexpected cost increases and/or delays to our desired timelines for the studies.

We will need to obtain clearance from applicable foreign regulatory authorities prior to initiating dosing in the ANA598 Phase IIb study in countries outside of the United States and prior to initiating the ANA773 Phase IIa study. There is no guarantee that we will be able to timely satisfy the requests of any such foreign regulatory authorities or that such regulatory authorities will not impose additional requirements on the conduct or the studies, or allow the studies to proceed.

The FDA could impose additional requirements on the development of ANA598 which could result in unexpected cost increases and/or delays to our development timelines.

The development of ANA598 in the United States is subject to ongoing regulation by the FDA. There is no guarantee that the FDA will not impose additional requirements on our development program for ANA598, including requirements associated with patient enrollment, manufacturing processes of our clinical trials

materials or other development activities related to ANA598, which could result in increased costs to us or a delay in our desired timelines.

Fast track designation does not guarantee approval, or expedited approval, of ANA598 and there is no guarantee that ANA598 will maintain fast track designation.

In December 2008, we announced that the FDA granted fast track designation to ANA598 for the treatment of chronic HCV infection. Under the FDA Modernization Act of 1997, fast track designation is designed to facilitate the development and expedite the review of new drugs that are intended to treat serious or life-threatening conditions. Compounds selected must demonstrate the potential to address an unmet medical need for such a condition. Mechanisms intended to facilitate development include opportunities for frequent dialogue with FDA reviewers and for timely review of submitted protocols. However, the designation does not guarantee approval or expedited approval of any application for the product. Furthermore, the FDA may revoke fast track designation from a product candidate at any time if it determines that the criteria are no longer met.

We have recently decided to resume clinical investigation of ANA773 for HCV. There is no guarantee that development of the program will be continued beyond the upcoming Phase IIa study.

We have recently decided to resume clinical investigation of ANA773 in HCV. We intend to conduct a Phase IIa 28 day combination study of ANA773 where initial cohorts will be dosed with ANA773 and ribavirin and subsequent cohorts will test ANA773 as a triple combination with ribavirin and a direct-acting antiviral, to parallel the likely future use of interferon. We plan to conduct this trial in Europe and potentially countries outside of Europe. If ANA773 does not achieve viral load reduction at levels comparable to injectable interferon but with a cleaner side effect profile, the prospects for developing ANA773 as a competitive HCV product will be diminished. Furthermore, prior clinical development of ANA773 for HCV was conducted in the Netherlands and not under a U.S. Investigational New Drug Application, or IND. If, in the future, we want to proceed with the development of ANA773 for HCV in the United States, approval from the FDA under a U.S. IND will be required. There is no assurance that the FDA will agree that ANA773 should be tested as an investigational treatment for HCV. Currently, there is no evidence that a TLR7 agonist can confer long-term benefit as a therapy for HCV at an acceptable safety risk, and there is no assurance that the FDA will view the data from our ex-US studies as sufficiently compelling to allow clinical investigation. If the FDA does not view the data from our ex-US studies as sufficiently compelling, it may not allow studies under a U.S. IND, in which case development and commercialization of ANA773 for HCV in the United States would be precluded.

In 2007 we terminated our ANA975 development program due to challenges seen in animal toxicology studies. To the extent that the ANA975 toxicology observations are mechanism related, our ANA773 program could be negatively impacted, causing our stock price to decline.

ANA975 is an oral prodrug of isatoribine, a TLR7 agonist. In 2007 we discontinued the development of ANA975 as a treatment for HCV infection due to intense immune stimulation in animals. To the extent that any of the ANA975 toxicology observations are mechanism related, rather than compound specific, we, or a potential future collaborator, will need to determine whether the level of immune stimulation induced by TLR7 agonists can be modulated to achieve a potential therapeutic benefit with an acceptable safety profile. Although results from our ANA773 13-week animal toxicology study indicated that with every-other-day dosing of ANA773, immune stimulation of a magnitude believed to confer therapeutic potential can be achieved without adverse toxicology findings, there is no guarantee that this favorable toxicology profile will persist in future toxicology studies of longer duration, or that we will not see adverse safety findings in humans. If we are unable to modulate the immunomodulatory effect with a dose and schedule that provides therapeutic benefit without causing unacceptable adverse events, then the future development of ANA773 may not be viable, or attractive to a potential licensee, which could materially and adversely affect our business and cause our stock price to decline.

Delays in the commencement of clinical testing of our current and potential product candidates could result in increased costs to us and delay our ability to generate revenues.

Our potential drug products will require additional nonclinical testing and extensive clinical trials prior to submission of any regulatory application for commercial sales. Previously, we have conducted only early-stage clinical trials on our own. As a result, we have very limited experience conducting clinical trials. In part because of this limited experience, we cannot be certain that planned clinical trials will begin or be completed on time, if at all. Delays in the commencement of clinical testing could significantly increase our product development costs and delay product commercialization. In addition, many of the factors that may cause, or lead to, a delay in the commencement of clinical trials may also ultimately lead to denial of regulatory approval of a product candidate.

The commencement of clinical trials can be delayed for a variety of reasons, including delays in:

- demonstrating sufficient safety and efficacy to obtain regulatory approval to commence a clinical trial;
- reaching agreement on acceptable terms with prospective contract research organizations and trial sites;
- manufacturing sufficient quantities or producing drug meeting our quality standards for a product candidate;

- obtaining approval of an IND application or proposed trial design from the FDA; and
- obtaining institutional review board approval to conduct a clinical trial at a prospective site.

In addition, the commencement of clinical trials may be delayed due to insufficient patient enrollment, which is a function of many factors, including the size and nature of the patient population, the nature of the protocol, the proximity of patients to clinical sites, the availability of effective treatments for the relevant disease, the number of other products under development competing for the same patients in trials and the eligibility criteria for the clinical trial.

Delays in the completion of, or the termination of, clinical testing of our current and potential product candidates could result in increased costs to us and delay or prevent us from generating revenues.

Once a clinical trial has begun, it may be delayed, suspended or terminated by us, potential future collaborators, the FDA, or other regulatory authorities due to a number of factors, including:

- ongoing discussions with the FDA or other regulatory authorities regarding the scope or design of our clinical trials;
- failure to conduct clinical trials in accordance with regulatory requirements;
- lower than anticipated enrollment or retention rate of patients in clinical trials;
- inspection of the clinical trial operations or trial sites by the FDA or other regulatory authorities resulting in the imposition of a clinical hold;
- lack of adequate funding to continue clinical trials;
- negative results of clinical trials;
- negative or potentially problematic results of ongoing and concurrent non-clinical toxicology studies;
- requests by the FDA for supplemental information on, or clarification of, the results of clinical trials conducted in other countries;
- insufficient supply or deficient quality of drug candidates or other materials necessary for the conduct of our clinical trials; or
- serious adverse events or other undesirable drug-related side effects experienced by participants.

Many of the factors that may lead to a delay, suspension or termination of clinical testing of a current or potential product candidate may also ultimately lead to denial of regulatory approval of a current or potential product candidate. If we experience delays in the completion of, or termination of, clinical testing, our financial results and the commercial prospects for our product candidates may be harmed, and our ability to generate product revenues will be delayed.

Even if we successfully complete clinical trials of ANA598, ANA773 or any future product candidate, there are no assurances that we will be able to submit, or obtain FDA approval of, a new drug application.

There can be no assurance that if our clinical trials of ANA598, ANA773 or any other potential product candidate are successfully completed, we will be able to submit a new drug application, or NDA, to the FDA or that any NDA we submit will be approved by the FDA in a timely manner, if at all. If we are unable to submit a NDA with respect to ANA598, ANA773 or any future product candidate, or if any NDA we submit is not approved by the FDA, we will be unable to commercialize that product in the United States. The FDA can and does reject NDAs and may require additional clinical trials, even when drug candidates performed well or achieved favorable results in large-scale Phase III clinical trials. If we fail to commercialize ANA598, ANA773 or any future product candidate, we may be unable to generate sufficient revenues to attain profitability, and our reputation in the industry and in the investment community would likely be damaged, each of which would cause our stock price to decrease.

If we successfully develop products but those products do not achieve and maintain market acceptance, our business will not be profitable.

Even if ANA598, ANA773 or any future product candidates are approved for commercial sale by the FDA or other regulatory authorities, the degree of market acceptance of any approved product candidate by physicians, healthcare professionals and third-party payors and our profitability and growth will depend on a number of factors, including:

- our ability to provide acceptable evidence of safety and efficacy;
- relative convenience and ease of administration;
- the prevalence and severity of any adverse side effects;
- availability of alternative treatments;
- pricing and cost effectiveness;
- effectiveness of our or our collaborators' sales and marketing strategy;
- our ability to obtain sufficient third-party insurance coverage or reimbursement; and
- our ability to establish or maintain an attractive price for ANA598 when used in combination with other agents.

If ANA598, ANA773 or any future product candidate does not provide additional clinical benefit when included within a treatment regimen, that product likely will not be accepted favorably by the market. If any products we or our collaborators may develop do not achieve market acceptance, then we will not generate sufficient revenue to achieve or maintain profitability.

In addition, even if our products achieve market acceptance, we may not be able to maintain that market acceptance over time if:

- new products or technologies are introduced that are more favorably received than our products, are more cost effective or render our products obsolete; or
- complications, such as long-term toxicities and viral resistance, arise with respect to use of our products.

We depend on outside parties to conduct our clinical trials, which may result in costs and delays that prevent us from obtaining regulatory approval or successfully commercializing product candidates.

We engage clinical investigators and medical institutions to enroll patients in planned clinical trials and contract research organizations to perform data collection and analysis and other aspects of our preclinical studies and clinical trials. As a result, we depend on these clinical investigators, medical institutions and contract research organizations to properly perform the studies and trials. If these parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or for other reasons, our clinical trials may be extended, delayed or terminated. We may not be able to enter into replacement arrangements without undue delays or excessive expenditures. If there are delays in testing or regulatory approvals as a result of the failure to perform by third-parties, our drug development costs will increase and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. In addition, we may not be able to maintain any of these existing relationships, or establish new ones on acceptable terms, if at all.

We do not have internal manufacturing capabilities, and if we fail to develop and maintain supply relationships with future collaborators or other outside manufacturers, we may be unable to develop or commercialize any of our products.

Our ability to develop and commercialize products will depend in part on our ability to manufacture, or arrange for collaborators or other parties to manufacture, our products at a competitive cost, in accordance with regulatory requirements and in sufficient quantities for clinical testing and eventual commercialization. Our current manufacturing agreements reflect a much smaller scale than would be required for commercialization. If we are unable to enter into or maintain commercial-scale manufacturing agreements with future collaborators or capable contract manufacturers on acceptable terms the development and commercialization of our products could be delayed, which would adversely affect our ability to generate revenues and would increase our expenses.

If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market any products we may develop, we may not be able to generate product revenue.

We do not currently have the capabilities for the sales, marketing and distribution of pharmaceutical products. In order to commercialize any products, we would have to build our sales, marketing, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. The establishment and development of our own sales force to market any products we may develop in the United States will be expensive and time-consuming and could delay any product launch, and we cannot be certain that we would be able to successfully develop this capacity. If we are unable to establish our sales and marketing capability or any other non-technical capabilities necessary to commercialize any product we may develop, we will need to contract with third parties to market and sell any products we may develop in the United States. We will also need to develop a plan to market and sell any products we may develop outside the United States. If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with third parties, we may not be able to generate product revenue and may not become profitable.

If we are unable to retain key management and scientific staff, we may be unable to successfully develop or commercialize our product candidates.

We are a small company and have approximately 25 employees. Our success depends on our continued ability to retain and motivate highly qualified management and scientific personnel. In particular, our programs depend on our ability to retain highly skilled clinical and preclinical personnel in the field of HCV.

We may not be able to retain qualified management and scientific personnel in the future due to the intense competition for qualified personnel among biotechnology and pharmaceutical businesses, particularly in the San Diego, California area. If we are not able to retain the necessary personnel to accomplish our business objectives, we may experience constraints that will impede significantly the achievement of our development objectives. In addition, all of our employees are “at will” employees, which means that any employee may quit at any time and we may terminate any employee at any time. Currently we do not have employment agreements with any employees or members of senior management that provide any guarantee of continued employment by us. We do not currently carry “key person” insurance covering members of senior management other than Steve Worland, Ph.D., our President and Chief Executive Officer. The insurance covering Dr. Worland is in the amount of \$1.5 million. If we lose the services of Dr. Worland, or James L. Freddo, M.D., our Senior Vice President, Drug Development and Chief Medical Officer, or other members of our senior management team or key personnel, we may not be able to find suitable replacements, and our business may be harmed as a result.

Earthquake or wildfire damage to our facilities could delay our research and development efforts and adversely affect our business.

Our headquarters and research and development facilities in San Diego, California, are located in a seismic zone, and there is the possibility of an earthquake, which could be disruptive to our operations and result in delays in our research and development efforts. In addition, San Diego has experienced several severe wildfires during the past several years which have destroyed or damaged many businesses and residences in the San Diego area. In the event of an earthquake or a severe wildfire, if our facilities or the equipment in our facilities are significantly damaged or destroyed for any reason, or we are otherwise required to shut down our operations, we may not be able to rebuild or relocate our facility or replace any damaged equipment, or otherwise recommence our business operations, in a timely manner and our business, financial condition and results of operations could be materially and adversely affected.

Our securities available-for-sale held in the form of marketable securities are subject to market, interest and credit risk that may reduce their value.

A portion of our securities available-for-sale is invested in marketable securities. Our cash position may be adversely affected by changes in the value of these securities. In particular, the value of these holdings may be adversely affected by increases in interest rates, downgrades by rating agencies on the issuers of corporate bonds included in the portfolio and by other factors which may result in other than temporary declines in value of the investments. Each of these events may cause us to record charges to reduce the carrying value of our investment portfolio and may adversely affect our cash position.

Risks Related to Our Industry

Because our product candidates and development and collaboration efforts depend on our intellectual property rights, adverse events affecting our intellectual property rights will harm our ability to commercialize products.

Our commercial success depends on obtaining and maintaining patent protection and trade secret protection of our product candidates, proprietary technologies and their uses, as well as successfully defending these patents against third-party challenges. We will only be able to protect our product candidates, proprietary technologies and their uses from unauthorized use by third parties to the extent that valid and enforceable patents or effectively-protected trade secrets cover them.

Due to evolving legal standards relating to the patentability, validity and enforceability of patents covering pharmaceutical inventions and the scope of claims made under these patents, our ability to obtain and enforce patents is uncertain and involves complex legal and factual questions. Accordingly, rights under any issued patents may not provide us with sufficient protection for ANA598 or ANA773 or provide sufficient protection to afford us a commercial advantage against competitive

products or processes. In addition, we cannot guarantee that any patents will issue from any pending or future patent applications owned by or licensed to us.

Even with respect to patents that have issued or will issue, we cannot guarantee that the claims of these patents are, or will be valid, enforceable or will provide us with any significant protection against competitive products or otherwise be commercially valuable to us. For example:

- we might not have been the first to make, conceive, or reduce to practice the inventions covered by all or any of our pending patent applications and issued patents;
- we might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies;
- it is possible that none of our pending patent applications will result in issued patents;
- our issued or acquired patents may not provide a basis for commercially viable products, may not provide us with any competitive advantages, or may be challenged by third parties;
- our issued patents may not be valid or enforceable;
- we may not develop additional proprietary technologies that are patentable; or
- the patents of others may have an adverse effect on our business.

Patent applications in the United States are maintained in confidence for up to 18 months or longer after their filing. Consequently, we cannot be certain that we were the first to invent, or the first to file patent applications on our product candidates. In the event that a third party has also filed a U.S. patent application relating to our product candidates or a similar invention, we may have to participate in interference proceedings declared by the U.S. Patent Office to determine priority of invention in the United States. The costs of these proceedings could be substantial and it is possible that our efforts would be unsuccessful, resulting in a material adverse effect on our U.S. patent position. Furthermore, we may not have identified all U.S. and foreign patents or published applications that affect our business either by blocking our ability to commercialize our drugs or by covering similar technologies that affect our drug market.

In addition, some countries, including many in Europe, do not grant patent claims directed to methods of treating humans, and in these countries patent protection may not be available at all to protect our drug candidates. Even if patents issue, we cannot guarantee that the claims of those patents will be valid and enforceable or provide us with any significant protection against competitive products, or otherwise be commercially valuable to us. We may be particularly affected by this because we expect that ANA598, if approved, will be marketed in foreign countries with high incidences of HCV infection.

Other companies may obtain patents and/or regulatory approvals to use the same drugs to treat diseases other than HCV. As a result, we may not be able to enforce our patents effectively because we may not be able to prevent healthcare providers from prescribing, administering or using another company's product that contains the same active substance as our products when treating patients infected with HCV.

If we fail to obtain and maintain patent protection and trade secret protection of ANA598 or ANA773, proprietary technologies and their uses, the competition we face would increase, reducing our potential revenues and adversely affecting our ability to attain or maintain profitability.

If we are sued for infringing intellectual property rights of others, it will be costly and time-consuming, and an unfavorable outcome in that litigation would have a material adverse effect on our business.

Our commercial success also depends upon our ability to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing the proprietary rights of third parties. We may be exposed to future litigation by third parties based on claims that our product candidates, technologies or activities infringe the intellectual property rights of others. Numerous U.S. and foreign issued patents and pending patent applications owned by others exist in HCV. These could materially affect our ability to develop our drug candidates or sell our products. Because patent applications can take many years to issue, there may be currently pending applications, unknown to us, which may later result in issued patents that our product candidates or technologies may infringe. There also may be existing patents, of which we are not aware, that our product candidates or technologies may inadvertently infringe. Further, there may be issued patents and pending patent applications in fields relevant to our business, of which we may become aware from time to time, that we believe we do not infringe or that we believe are invalid or relate to immaterial portions of our overall drug discovery and development efforts. We cannot assure you that third parties holding any of these patents or patent applications will not assert infringement claims against us for damages or seeking to enjoin our activities. We also cannot assure you that, in the event of litigation, we will be able to successfully assert any belief we may have as to non-infringement, invalidity or immateriality, or that any infringement claims will be resolved in our favor.

There is a substantial amount of litigation involving patent and other intellectual property rights in the biotechnology and biopharmaceutical industries generally. Any litigation or claims against us, with or without merit, may cause us to incur substantial costs, could place a significant strain on our financial resources, divert the attention of management from our core business and harm our reputation. In addition, intellectual property litigation or claims could result in substantial damages and force us to do one or more of the following if a court decides that we infringe on another party's patent or other intellectual property rights:

- cease selling, incorporating or using any of our product candidates or technologies that incorporate the challenged intellectual property;

- obtain a license from the holder of the infringed intellectual property right, which license may be costly or may not be available on reasonable terms, it at all; or
- redesign our processes or technologies so that they do not infringe, which could be costly and time consuming and may not be possible.

If we find during clinical evaluation that our drug candidates for the treatment of HCV should be used in combination with a product covered by a patent held by another company or institution, and that a labeling instruction is required in product packaging recommending that combination, we could be accused of, or held liable for, inducing infringement of the third-party patents covering the product recommended for co-administration with our product. In that case, we may be required to obtain a license from the other company or institution to use the required or desired package labeling, which may not be available on reasonable terms, or at all.

If we fail to obtain any required licenses or make any necessary changes to our technologies, we may be unable to develop or commercialize some or all of our product candidates.

We may be involved in lawsuits or proceedings to protect or enforce our patent rights, trade secrets or know-how, which could be expensive and time-consuming.

The defense and prosecution of intellectual property suits and related legal and administrative proceedings can be both costly and time-consuming. Litigation and interference proceedings could result in substantial expense to us and significant diversion of effort by our technical and management personnel. Further, the outcome of patent litigation is subject to uncertainties that cannot be adequately quantified in advance, including the demeanor and credibility of witnesses and the identity of the adverse party. This is especially true in biotechnology related patent cases that may turn on the testimony of experts as to technical facts upon which experts may reasonably disagree and which may be difficult to comprehend by a judge or jury. An adverse determination in an interference proceeding or litigation with respect to ANA598 or ANA773, to which we may become a party could subject us to significant liabilities to third parties or require us to seek licenses from third parties. If required, the necessary licenses may not be available on acceptable terms, or at all. Adverse determinations in a judicial or administrative proceeding or failure to obtain necessary licenses could prevent us from commercializing ANA598 or ANA773, which could have a material and adverse effect on our results of operations.

Furthermore, because of the substantial amount of pre-trial document and witness discovery required in connection with intellectual property litigation, there is risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these

results to be negative, it could have a substantial adverse effect on the trading price of our common stock.

Confidentiality agreements with employees and others may not adequately prevent disclosure of trade secrets and other proprietary information and may not adequately protect our intellectual property.

We also rely on trade secrets to protect our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. In order to protect our proprietary technology and processes, we also rely in part on confidentiality and intellectual property assignment agreements with our corporate partners, employees, consultants, outside scientific collaborators and sponsored researchers and other advisors. These agreements may not effectively prevent disclosure of confidential information nor result in the effective assignment to us of intellectual property, and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information or other breaches of the agreements. In addition, others may independently discover our trade secrets and proprietary information, and in such case we could not assert any trade secret rights against such party. Enforcing a claim that a party illegally obtained and is using our trade secrets is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets. Costly and time-consuming litigation could be necessary to seek to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

Many competitors have significantly more resources and experience, which may harm our commercial opportunity.

The biotechnology and pharmaceutical industries are subject to intense competition and rapid and significant technological change. We have many potential competitors, including major drug and chemical companies, specialized biotechnology firms, academic institutions, government agencies and private and public research institutions. Many of our competitors have significantly greater financial resources, experience and expertise in:

- research and development;
- preclinical testing;
- clinical trials;
- regulatory approvals;
- manufacturing; and
- sales and marketing of approved products.

Smaller or early-stage companies and research institutions may also prove to be significant competitors, particularly through collaborative arrangements with large and established pharmaceutical or other companies. We will also face competition

from these parties in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, and acquiring and in-licensing technologies and products complementary to our programs or potentially advantageous to our business. If any of our competitors succeed in obtaining approval from the FDA or other regulatory authorities for their products sooner than we do or for products that are more effective or less costly than ours, our commercial opportunity could be significantly reduced.

If our competitors develop treatments for HCV that are approved faster, marketed better or demonstrated to be more effective than ANA598, ANA773, or any other products that we may develop, our commercial opportunity will be reduced or eliminated.

We believe that a significant number of drugs are currently under development and may become available in the future for the treatment of HCV. Potential competitors may develop treatments for HCV that are more effective or less costly than our product candidates or that would make our product candidates obsolete or non-competitive. Some of these products may use therapeutic approaches that compete directly with ANA598 or ANA773. In addition, less expensive generic forms of currently marketed drugs could lead to additional competition upon patent expiration or invalidations.

ANA598, a non-nucleoside polymerase inhibitor, was selected as a development candidate for the treatment of chronic hepatitis C virus infection in June 2007. If approved, ANA598 would likely be used in combination with the current standard of care and/or other direct antiviral agents (DAAs) such as protease inhibitors, NS5A inhibitors, and/or polymerase inhibitors. ANA598 may also be used in combination with cyclophilin inhibitors which target a host (human) enzyme. Any product currently approved or approved in the future for the treatment of HCV infection could decrease or eliminate the commercial opportunity of ANA598. Other non-nucleoside inhibitors would likely be the most direct competitors for ANA598. To our knowledge, non-nucleoside polymerase inhibitor programs are currently under clinical evaluation by Pfizer, Gilead, Tibotec/Johnson & Johnson (Janssen), Abbott, Boehringer Ingelheim, Bristol-Myers Squibb, Idenix, and Vertex. Further, a number of companies have non-nucleoside polymerase inhibitor research and pre-clinical development programs.

Other potential competitors are products currently approved for the treatment of HCV infection: PegIntron (pegylated interferon-alfa-2b), which are marketed by Merck; and Pegasys (pegylated interferon-alfa-2a), Copegus (ribavirin USP), and Roferon- A (interferon-alfa-2a), which are marketed by Roche. ANA598 may also face competition from DAAs currently in later stage clinical development for the treatment of HCV including the protease inhibitors (telaprevir, which is being developed by Vertex Pharmaceuticals, Tibotec (Janssen Pharmaceutica / Johnson & Johnson) and Mitsubishi Tanabe Pharma; boceprevir, in development by Merck; TMC-435350, in development by Johnson & Johnson (Tibotec) and Medivir; BMS-650032 in development by Bristol-Myers Squibb; BI-201335, in development by

Boehringer Ingelheim; and danoprevir, in development by Roche), the nucleoside polymerase inhibitors (RG7128, in development by Roche; and PSI-7977, in development by Pharmasset), the NS5A inhibitor (BMS-790052, in development by Bristol-Myers Squibb), and the non-nucleoside inhibitors (GS-9190, in development by Gilead; VX-222, in development by Vertex; ABT-072 and ABT-333, in development by Abbott; BMS-791325, in development by BMS, IDX375 by Idenix, BI-207127 by Boehringer Ingelheim, TMC-647055 by Tibotec / Johnson & Johnson; and filibuvir, in development by Pfizer). Cyclophilin inhibitors, such as DEB-025, in development by Novartis may also be competitive with ANA598.

If we cannot establish pricing of our product candidates acceptable to the government, insurance companies, managed care organizations and other payors, any product sales will be severely hindered.

The continuing efforts of the government, insurance companies, managed care organizations and other payors of health care costs to contain or reduce costs of health care may adversely affect:

- our ability to set a price we believe is fair for any products we or our collaborators may develop;
- our ability to generate adequate revenues and gross margins; and
- the availability of capital.

In certain foreign markets, the pricing of prescription pharmaceuticals is subject to government control. In the United States, comprehensive health care reform legislation was recently enacted by the Federal government and we expect that there will continue to be a number of federal and state proposals to implement government control over the cost of prescription pharmaceuticals and on the reform of the Medicare and Medicaid systems. The trend toward managed health care in the United States will continue to put pressure on the rate of adoption and pricing of prescription pharmaceuticals, which may result in lower prices for our product candidates. We are currently unable to predict what additional legislation or regulation, if any, relating to the health care industry or third-party coverage and reimbursement may be enacted in the future or what effect the recently enacted federal health care reform legislation or any such additional legislation or regulation would have on our business.

If we cannot arrange for reimbursement policies favorable to our product candidates, their sales will be severely hindered.

Our ability to commercialize ANA598 or any other product candidate successfully will depend in part on the extent to which governmental authorities, private health insurers and other organizations establish appropriate reimbursement levels for the cost of ANA598 or any other product and related treatments. Third party payors are increasingly challenging the prices charged for medical products and services, including treatments for HCV. Also, the trend toward managed health care in the United States as well as the comprehensive health care reform legislation recently

enacted by the Federal government could result in exclusion of our product candidates from reimbursement programs such as Medicare and Medicaid. The cost containment measures that health care payors and providers are instituting and the effect of the comprehensive health care reform legislation recently enacted by the Federal government could materially and adversely affect our ability to earn product revenue and generate significant profits and could impact our ability to raise capital.

Product liability claims may damage our reputation and, if insurance proves inadequate, the product liability claims may harm our results of operations.

We face an inherent risk of product liability exposure for claimed injuries related to the testing of our product candidates in human clinical trials, and will face an even greater risk if we or our potential future collaborators sell our product candidates commercially. If we cannot successfully defend ourselves against product liability claims, we will incur substantial liabilities. Regardless of merit or eventual outcome, product liability claims may result in:

- decreased demand for our product candidates;
- injury to our reputation;
- withdrawal of clinical trial participants;
- the inability to establish new collaborations with potential collaborators;
- substantial costs of related litigation;
- substantial monetary awards to patients; and
- the inability to commercialize our product candidates.

We currently have product liability insurance that covers our clinical trials and plan to increase and expand this coverage as we commence larger scale trials. We also intend to expand our insurance coverage to include the sale of commercial products if marketing approval is obtained for any of our product candidates. However, insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost and we may not be able to obtain insurance coverage that will be adequate to satisfy any liability that may arise.

Any claims relating to our improper handling, storage or disposal of biological, hazardous and radioactive materials could be time-consuming and costly.

Our research and development involves the controlled use of hazardous materials, including chemicals that cause cancer, volatile solvents, including ethylacetate and acetonitrile, radioactive materials and biological materials including plasma from patients infected with HCV or other infectious diseases that have the potential to transmit disease. Our operations also produce hazardous waste products. We are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these materials and waste products. If we fail to comply with these laws and regulations or with the conditions attached to our operating licenses, the licenses could be revoked, and we could be subjected to

criminal sanctions and substantial liability or required to suspend or modify our operations. Although we believe that our safety procedures for handling and disposing of these materials comply with legally prescribed standards, we cannot completely eliminate the risk of accidental contamination or injury from these materials. In the event of contamination or injury, we could be held liable for damages or penalized with fines in an amount exceeding our resources, and our clinical trials could be suspended. In addition, we may have to incur significant costs to comply with future environmental laws and regulations.

Our business and operations would suffer in the event of system failures.

Despite the implementation of security measures, our internal computer systems are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. Any system failure, accident or security breach that causes interruptions in our operations could result in a material disruption of our development programs. To the extent that any disruption or security breach results in a loss or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we may incur liability as a result, our development programs may be adversely affected and the further development of our product candidates may be delayed. In addition, we may incur additional costs to remedy the damages caused by these disruptions or security breaches.

Risks Related to Our Common Stock

Future sales of our common stock may cause our stock price to decline.

Our current stockholders hold a substantial number of shares of our common stock that they are able to sell in the public market. Significant portions of these shares are held by a small number of stockholders. Sales by our current stockholders of a substantial number of shares or the expectation that such sale may occur, could significantly reduce the market price of our common stock.

Our stock price may be volatile.

The market price of our common stock may fluctuate significantly in response to a number of factors, most of which we cannot control, including:

- changes in the regulatory status of our product candidates, including the status and results of our clinical trials of ANA598 and ANA773;
- significant contracts, new technologies, acquisitions, commercial relationships, joint ventures or capital commitments;
- disputes or other developments relating to proprietary rights, including patents, trade secrets, litigation matters, and our ability to patent or otherwise protect our product candidates and technologies;
- conditions or trends in the pharmaceutical and biotechnology industries;

- fluctuations in stock market prices and trading volumes of similar companies, of our competitors or of the markets generally;
- variations in our quarterly operating results;
- changes in securities analysts' estimates of our financial performance;
- failure to meet or exceed securities analysts' or investors' expectations of our quarterly financial results, clinical results or our achievement of milestones;
- sales of large blocks of our common stock, or the expectation that such sales may occur, including sales by our executive officers, directors and significant stockholders;
- additions or departures of key personnel;
- discussion of our business, products, financial performance, prospects or our stock price by the financial and scientific press and online investor communities such as chat rooms;
- regulatory developments in the United States and foreign countries;
- economic and political factors, including wars, terrorism and political unrest; and
- technological advances by our competitors.

Our quarterly results may fluctuate significantly, resulting in fluctuations in our stock price.

We expect our results of operations to be subject to quarterly fluctuations. The level of our revenues, if any, and results of operations at any given time, will be based primarily on the following factors:

- the status of development of ANA598, ANA773 and our other product candidates, including results of preclinical studies and clinical trials and changes in regulatory status;
- our execution of collaborative, licensing or other arrangements and the timing and accounting treatment of payments we make or receive under these arrangements;
- whether or not we achieve specified research or commercialization milestones under any agreement that we enter into with collaborators and the timely payment by commercial collaborators of any amounts payable to us;
- variations in the level of expenses related to our product candidates or potential product candidates during any given period; and
- the effect of competing technological and market developments.

These factors, some of which are not within our control, may cause the price of our stock to fluctuate substantially. In particular, if our quarterly operating results fail to meet or exceed the expectations of securities analysts or investors, our stock price

could drop suddenly and significantly. We believe that quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.

Our largest stockholders may take actions that are contrary to your interests, including selling their stock.

A small number of our stockholders hold a significant amount of our outstanding stock. These stockholders may support competing transactions and have interests that are different from yours. In addition, the average number of shares of our stock that trade each day is generally low. As a result, sales of a large number of shares of our stock by these large stockholders or other stockholders within a short period of time could adversely affect our stock price.

Anti-takeover provisions in our organizational documents and Delaware law may discourage or prevent a change in control, even if an acquisition would be beneficial to our stockholders, which could affect our stock price adversely and prevent attempts by our stockholders to replace or remove our current management.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that may delay or prevent a change in control, discourage bids at a premium over the market price of our common stock and adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. These provisions include:

- dividing our board of directors into three classes serving staggered three-year terms;
- prohibiting our stockholders from calling a special meeting of stockholders;
- permitting the issuance of additional shares of our common stock or preferred stock without stockholder approval;
- prohibiting our stockholders from making certain changes to our amended and restated certificate of incorporation or amended and restated bylaws except with 66 $\frac{2}{3}$ % stockholder approval; and
- requiring advance notice for raising matters of business or making nominations at stockholders' meetings.

We are also subject to provisions of the Delaware corporation law that, in general, prohibit any business combination with a beneficial owner of 15% or more of our common stock for three years unless the holder's acquisition of our stock was approved in advance by our board of directors. Although we believe these provisions collectively provide for an opportunity to receive higher bids by requiring potential acquirers to negotiate with our board of directors, they would apply even if the offer may be considered beneficial by some stockholders. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our

board of directors, which is responsible for appointing the members of our management.

We have never paid cash dividends on our capital stock and we do not anticipate paying dividends in the foreseeable future.

We have paid no cash dividends on any of our classes of capital stock to date, and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. In addition, the terms of any future debt or credit facility may preclude us from paying any dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of potential gain for the foreseeable future.

Item 1B. Unresolved Staff Comments

Not Applicable.

Item 2. Properties

Our headquarters and research and development facility is located in approximately 14,000 square feet of office and laboratory space in San Diego, California. We occupy this facility under a lease, which expires on January 31, 2012.

Item 3. Legal Proceedings

We are currently not a party to any material legal proceedings.

Item 4. Reserved

Reserved.

Part II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchase of Equity Securities

Market Information

Our common stock is traded on the Nasdaq Global Market under the symbol ANDS. The following table sets forth the high and low sales prices for our common stock for the periods indicated, as reported on the Nasdaq Global Market.

<u>2010</u>	<u>High</u>	<u>Low</u>
First Quarter	\$2.65	\$1.83
Second Quarter	3.24	1.92
Third Quarter	2.42	1.67
Fourth Quarter	2.38	0.90

<u>2009</u>	<u>High</u>	<u>Low</u>
First Quarter	\$8.43	\$1.61
Second Quarter	6.90	1.68
Third Quarter	3.32	1.44
Fourth Quarter	3.02	1.79

Holders

As of January 28, 2011, there were approximately 5,400 holders of our common stock.

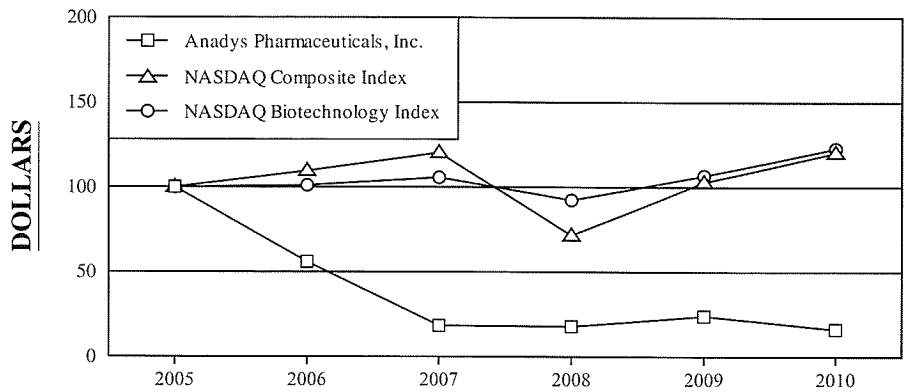
Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain future earnings, if any, for development of our business and therefore do not anticipate that we will declare or pay cash dividends on our capital stock in the foreseeable future.

Performance Measurement Comparison(1)

The following graph shows a comparison of the five year total cumulative returns of an investment of \$100 in cash on December 31, 2005 in (i) our common stock (ii) the Nasdaq Composite Index and (iii) the Nasdaq Biotechnology Index. All values assume reinvestment of the full amount of all dividends (to date, we have not declared any dividends).

Comparison of cumulative total return on investment since December 31, 2005:



	December 31, 2005	December 31, 2006	December 31, 2007	December 31, 2008	December 31, 2009	December 31, 2010
Anadys Pharmaceuticals, Inc.	\$100.00	\$ 55.91	\$ 18.30	\$17.84	\$ 23.98	\$ 16.14
NASDAQ Composite Index	100.00	109.52	120.27	71.51	102.89	120.29
NASDAQ Biotechnology Index	100.00	101.02	105.65	92.31	106.74	122.76

(1) This section is not “soliciting material,” is not deemed “filed” with the SEC and is not to be incorporated by reference in any filing of the Company under the 1933 Act or the 1934 Act whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

Item 6. Selected Financial Data

The selected financial data set forth below with respect to our consolidated statements of operations for each of the three years in the period ended December 31, 2010 and, with respect to our consolidated balance sheets, at December 31, 2010 and 2009 are derived from our audited consolidated financial included elsewhere in this Annual Report on Form 10-K. The statement of operations data for the years ended December 31, 2007 and 2006 and the balance sheet data as of December 31, 2008, 2007 and 2006 are derived from our audited consolidated financial statements that are not included in this Annual Report on Form 10-K. The information set forth below is not necessarily indicative of the results of future operations and should be read in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and notes thereto appearing elsewhere in this Annual Report on Form 10-K.

	For the Year Ended December 31,				
	2010	2009	2008	2007	2006
	(In thousands, except net loss per share)				
Consolidated Statements of Operations Data:					
Revenues	\$ —	\$ —	\$ —	\$ 24,118	\$ 5,420
Operating expenses:					
Research and development	12,026	19,494	25,993	28,192	25,419
General and administrative	6,478	8,243	8,109	8,692	11,308
Total operating expenses	18,504	27,737	34,102	36,884	36,727
Loss from operations	(18,504)	(27,737)	(34,102)	(12,766)	(31,307)
Other income (expense):					
Interest income	106	478	1,482	3,611	4,727
Interest expense	—	—	—	—	(69)
Gain (loss) from valuation of common stock warrant liability	2,016	(151)	—	—	—
Other, net	33	132	218	(17)	(111)
Total other income (expense), net . . .	2,155	459	1,700	3,594	4,547
Net loss	<u>\$(16,349)</u>	<u>\$(27,278)</u>	<u>\$(32,402)</u>	<u>\$(9,172)</u>	<u>\$(26,760)</u>
Net loss per share, basic and diluted:	<u>\$ (0.38)</u>	<u>\$ (0.81)</u>	<u>\$ (1.13)</u>	<u>\$ (0.32)</u>	<u>\$ (0.94)</u>
Shares used in calculating net loss per share, basic and diluted:	<u>43,570</u>	<u>33,775</u>	<u>28,750</u>	<u>28,646</u>	<u>28,512</u>

	As of December 31,				
	2010	2009	2008	2007	2006
	(In thousands)				
Consolidated Balance Sheet Data:					
Cash, cash equivalents and securities available-for-sale . .	\$ 37,984	\$ 20,490	\$ 27,936	\$ 56,495	\$ 82,149
Working capital	34,452	13,769	24,325	52,084	75,054
Total assets	39,537	21,735	31,674	61,526	89,401
Long-term debt, net of current portion	—	—	—	—	—
Accumulated deficit	(299,681)	(283,332)	(256,054)	(223,652)	(214,480)
Total stockholders' equity	34,673	14,429	25,825	55,679	60,325

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

**MANAGEMENT'S DISCUSSION AND ANALYSIS OF
FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

This discussion and analysis should be read in conjunction with our financial statements and notes thereto included in this Annual Report on Form 10-K (this Annual Report). Operating results are not necessarily indicative of results that may occur in future periods.

This Annual Report contains forward-looking statements. These forward-looking statements involve a number of risks and uncertainties. Such forward-looking statements include statements about our development plans and programs, clinical trials, strategies, objectives, and other statements that are not historical facts, including statements which may be preceded by the words "intend," "will," "plan," "expect," "anticipate," "estimate," "aim," "seek," "believe," "hope" or similar words. For such statements, we claim the protection of the Private Securities Litigation Reform Act of 1995. Readers of this Annual Report are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date on which they are made. We undertake no obligation to update publicly or revise any forward-looking statements. Actual events or results may differ materially from our expectations. Important factors that could cause actual results to differ materially from those stated or implied by our forward-looking statements include, but are not limited to, the risk factors identified in our periodic reports filed with the Securities and Exchange Commission (SEC), including those set forth in "Item 1A. Risk Factors" in this Annual Report.

Overview

Anadys Pharmaceuticals, Inc. is a biopharmaceutical company dedicated to improving patient care by developing novel medicines for the treatment of hepatitis C. We believe hepatitis C represents a large and significant unmet medical need. Our objective is to contribute to an improved treatment outcome for patients with this serious disease. We are currently focusing most of our efforts on the development of ANA598, a direct-acting antiviral (DAA) for the treatment of hepatitis C. We are currently conducting a Phase II study of ANA598 in combination with pegylated interferon alfa and ribavirin, which is the current standard of care (SOC) for the treatment of hepatitis C. This study is being conducted in patients infected with hepatitis C virus (HCV).

We are also making plans to resume the clinical investigation of ANA773, an oral, small-molecule inducer of endogenous interferons that acts via the Toll-like receptor 7, or TLR7, pathway. In 2009, we elected to suspend the development of ANA773 so that we could focus our resources on ANA598. In October 2010, we announced that we are resuming development of ANA773 for the treatment of hepatitis C. We have also previously investigated ANA773 for the treatment of cancer.

In June 2009, we initiated a strategic restructuring to focus our operations on the development of ANA598. The strategic restructuring resulted in a reduction in our workforce of approximately 40%.

On June 1, 2010, we sold approximately 5.8 million registered shares of common stock to institutional investors for gross proceeds of approximately \$12.5 million. The shares of common stock were at a purchase price of \$2.15 per share. The net proceeds related to this transaction were \$11.4 million. On October 20, 2010, we sold approximately 13.9 million registered shares of common stock to institutional and retail investors for gross proceeds of approximately \$25.0 million. The shares of common stock were at a purchase price of \$1.80 per share. The net proceeds related to this transaction were \$23.3 million. We intend to use the net proceeds from these financings to support the Phase IIb study of ANA598 and for general corporate purposes, including working capital.

We have incurred significant operating losses since our inception and, as of December 31, 2010, our accumulated deficit was \$299.7 million. We expect to incur substantial losses for at least the next several years as we:

- continue the development of ANA598 for the treatment of HCV;
- optimize methods for and scale-up manufacturing of ANA598 for clinical trials and potential commercialization;
- commercialize any product candidates that receive regulatory approval; and
- potentially in-license technology and acquire or invest in businesses, products or technologies that are synergistic with our own.

Research and Development

During 2010, 2009 and 2008, research and development expenses consisted primarily of costs associated with clinical development of the Company's product candidates. Research and development expenses may include external costs such as fees paid to clinical research organizations, clinical trial investigators, contract research organizations, drug substance and drug product manufacturers and consultants. Research and development expenses may also include internal costs such as compensation, supplies, materials, an allocated portion of facilities costs, an allocated portion of information systems support personnel and depreciation.

At this time, due to the risks inherent in the clinical trial process and given the multiple potential avenues for the development of our product candidates, we are unable to estimate with any certainty the costs we will incur in the continued development of our product candidates for commercialization. Clinical development timelines, likelihood of success and total costs vary widely. However, we expect our research and development costs to be substantial and to increase as we advance our product candidates through clinical development.

The following summarizes our research and development expenses for the years ended December 31, 2010, 2009 and 2008 (in thousands):

	<u>For the Year Ended December 31,</u>		
	<u>2010</u>	<u>2009</u>	<u>2008</u>
ANA598	\$ 8,808	\$10,355	\$11,044
ANA773	264	3,103	8,177
Infrastructure, support personnel and other	2,718	4,052	5,501
Section 48D grant	(489)	—	—
Severance related to 2009 strategic restructuring	—	630	—
Non-cash employee and non-employee share-based compensation	<u>725</u>	<u>1,354</u>	<u>1,271</u>
Total research and development expense	<u>\$12,026</u>	<u>\$19,494</u>	<u>\$25,993</u>

We submitted applications for qualified investments for ANA598 and ANA773 in a qualifying therapeutic discovery project under section 48D of the Internal Revenue Code. In October 2010, we received notification of grants in the aggregate amount of \$0.5 million being approved.

General and Administrative

General and administrative expenses consist primarily of salaries and benefits for executive, finance, investor relations, business development, human resources and legal personnel. In addition, general and administrative expenses include insurance costs, professional services and an allocated portion of facilities costs and information systems support personnel.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with United States generally accepted accounting principles (GAAP). The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses and related disclosure of contingent assets and liabilities. We review our estimates on an on-going basis and make adjustments to the consolidated financial statements as considered necessary. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ from these estimates under different assumptions or conditions. While all of our significant accounting policies are described in Note 1 to our consolidated financial statements included in this Annual Report, we believe the following accounting policies involve

the judgments and estimates used in the preparation of our consolidated financial statements:

Drug Development Costs. Drug development costs include costs associated with the development of our product candidates including the manufacturing of clinical trial material, payments to clinical trial investigators, payments to clinical research organizations and certain non-clinical activities. We review and accrue drug development costs based on work performed. We estimate work performed utilizing factors such as subject enrollment, estimated timeline for completion of studies and other factors. These costs and estimates vary based on the type, scope and length of non-clinical and clinical studies as well as other factors. Drug development cost accruals are subject to revisions as studies, projects and trials progress to completion. Expense is adjusted for revisions in the period in which the facts that give rise to the revision become known.

Common Stock Warrant Liability. We account for common stock warrants which may potentially be settled with cash as a liability. The common stock warrants have been recorded at their fair value at issuance and will continue to be recorded at fair value each subsequent balance sheet date until such time that they are exercised or are otherwise modified to remove the provisions that require this treatment, at which time the warrants will be adjusted to fair value and reclassified from liabilities to stockholders' equity. Any change in value between reporting periods will be recorded as other income (expense) at each reporting date. The fair value of the warrants is estimated using input assumptions derived by management to the Black-Scholes pricing model.

Share-Based Compensation. Share-based compensation cost is estimated at the grant date based on the award's fair-value as calculated by a Black-Scholes pricing model and the portion that is expected to vest is recognized as expense evenly over the requisite service period. The determination of the fair value of share-based payment awards on the date of grant using an option-pricing model is affected by our stock price as well as assumptions regarding a number of complex and subjective variables. These variables include, but are not limited to, our expected stock price volatility over the term of the awards, the risk-free interest rate, the expected term of the awards and expected forfeitures. If any of the assumptions used in the model change significantly, share-based compensation expense may differ materially in the future from that recorded in the current period.

Results of Operations

Comparison of the Years Ended December 31, 2010, 2009 and 2008

Research and Development Expenses. Research and development expenses were \$12.0 million, \$19.5 million and \$26.0 million for the years ended December 31, 2010, 2009 and 2008, respectively. The \$7.5 million decrease from 2009 to 2010 was attributable to a \$2.8 million decrease in ANA773 development costs, a \$1.5 million decrease in ANA598 development costs and a \$0.7 million decrease in facility costs associated with the relocation of our corporate headquarters in July 2009. The

remaining decrease of \$2.5 million was primarily attributed to personnel cost savings from our completed strategic restructuring which was initiated in June 2009. During 2010, we incurred external development costs of \$4.1 million associated with our ANA598 program. External development costs in 2010 related to the following: our Phase IIa combination study, the manufacturing of clinical trial materials for our Phase IIb combination study and our Phase IIb combination study which initiated screening in December 2010. During 2009, we incurred external development costs of \$5.0 million associated with our ANA598 program. External development costs in 2009 related to the following: our completed Phase Ib clinical trial in HCV patients, our completed long-term chronic toxicology studies of ANA598, our completed 14-day healthy volunteer study and our Phase IIa clinical trial in HCV patients. During 2009, we elected to suspend further development of ANA773 in order to focus our resources on ANA598. As such, development costs associated with ANA773 decreased \$2.8 million during 2010 when compared to the same period in 2009. ANA773 development costs during the year ended December 31, 2009 were primarily driven by our now completed Phase Ib clinical trial for the treatment of HCV. Our non-cash share-based compensation expense associated with share-based payments granted to our research and development employees was \$0.7 million and \$1.4 million for the years ended December 31, 2010 and 2009, respectively. Included as a component of our share-based compensation expense for the year ended December 31, 2009 was \$0.3 million of expense associated with the modification of stock options for individuals included in our completed 2009 strategic restructuring.

The \$6.5 million decrease from 2008 to 2009 was primarily due to \$6.4 million in cost savings associated with our strategic restructuring initiated in June 2009 of which \$5.1 million was due to reduced ANA773 development costs and \$1.3 million of which was due to reduced infrastructure and support personnel costs. These decreases were partially offset by severance costs of \$0.6 million. During 2009, we incurred \$5.0 million of external development costs associated with the following ANA598 program activities which consisted of the following: our completed Phase Ib clinical trial in HCV patients, our completed long-term chronic toxicology studies of ANA598, our completed 14-day healthy volunteer study and our on-going Phase IIa clinical trial in HCV patients. During 2009, we incurred \$1.7 million of external development costs associated with our ANA773 program activities: our completed Phase Ib clinical trial for HCV and our Phase I clinical trial for oncology. As we are not currently pursuing the development of ANA773 for oncology we do not anticipate incurring significant costs related to this indication in future periods. Our non-cash share-based compensation expense associated with share-based payments granted to our research and development employees was \$1.4 million for the year ended December 31, 2009 compared to \$1.3 million for the year ended December 31, 2008. Included in our non-cash share-based compensation expense for the year-ended December 31, 2009 is \$0.3 million associated with the modification of stock options for individuals included in our strategic restructuring.

General and Administrative Expenses. General and administrative expenses were \$6.5 million, \$8.2 million and \$8.1 million for the years ended December 31, 2010, 2009 and 2008, respectively. Included as a component of our general and

administrative expenses for the year ended December 31, 2009 was \$0.7 million in severance related costs associated with our 2009 strategic restructuring. The remaining decrease in costs from 2009 to 2010 was primarily related to personnel cost savings associated with our completed strategic restructuring and to a lesser extent fluctuations in costs associated with our patent portfolio. The \$0.1 million increase from 2008 to 2009 was primarily attributable to severance costs of \$0.7 million, which were partially offset by a reduction in allocated facility costs associated with the relocation of our corporate headquarters to a smaller facility. Non-cash share-based compensation expense associated with share-based payments granted to our general and administrative employees and non-employee directors for the years ended December 31, 2010, 2009 and 2008 was \$1.1 million, \$1.4 million and \$1.5 million, respectively. Included in our non-cash share-based compensation expense for the year-ended December 31, 2009 is \$0.1 million associated with the modification of stock options for individuals included in our 2009 strategic restructuring.

Interest Income. Interest income was \$0.1 million, \$0.5 million and \$1.5 million for the years ended December 31, 2010, 2009 and 2008, respectively. The \$0.4 million decrease in our interest income from 2009 to 2010 was primarily the result of lower yields on our securities as higher yield securities matured in 2009 and 2010 and were replaced with lower yield securities. The \$1.0 million decrease in our interest income from 2008 to 2009 was the result of a lower average cash, cash equivalents and securities available-for-sale balance and lower interest rates during 2009 compared to 2008. Our average balance of cash, cash equivalents and securities available-for-sale, which were invested in interest bearing securities, was \$22.9 million in 2009 compared to \$40.6 million in 2008. The decrease in our average cash balance from 2008 to 2009 was driven by our use of cash, cash equivalents and securities to fund our on-going operations partially offset by proceeds received from the equity financing during June 2009.

Valuation of Common Stock Warrant Liability. During 2010, the Company recorded a non-cash gain of \$2.0 million associated with the decrease in the fair value our common stock warrant liability from December 31, 2009 to December 31, 2010. This decrease was primarily a result of a decrease in the Company's stock price from December 31, 2009 and December 31, 2010. The fair value was calculated using the Black Scholes pricing model and is remeasured at each reporting period. During 2009, the Company recorded a non-cash loss of \$0.2 million associated with an increase in our common stock liability from June 3, 2009 (issuance date of the warrants) to December 31, 2009. Potential future increases in our stock price will result in losses being recognized in our statement of operations in future periods. Conversely, potential future declines in our stock price will result in gains being recognized in our statement of operations in future periods.

Liquidity and Capital Resources

Overview

Our December 31, 2010 cash, cash equivalents and marketable securities balance was \$38.0 million. Our cash, cash equivalents and available-for sale securities increased by \$17.5 million from December 31, 2009 to December 31, 2010. The increase in cash, cash equivalents and securities available-for-sale is the result of net proceeds of \$34.7 million received from our completed equity financings in June and October 2010, partially offset by our year-to-date cash utilization to fund our operations. We believe that our existing cash, cash equivalents and securities available-for-sale will be sufficient to meet our projected operating requirements for at least the next twelve months.

On June 1, 2010, we sold approximately 5.8 million registered shares of common stock to institutional investors for gross proceeds of approximately \$12.5 million. The shares of common stock were at a purchase price of \$2.15 per share. The net proceeds related to this transaction were \$11.4 million. On October 20, 2010, we sold approximately 13.9 million registered shares of common stock to institutional and retail investors for gross proceeds of approximately \$25.0 million. The shares of common stock were at a purchase price of \$1.80 per share. The net proceeds related to this transaction were \$23.3 million.

Excluding the net proceeds from our equity financings completed during June and October 2010, we used \$17.2 million in cash to fund operations during the year ended December 31, 2010 compared to \$23.4 million during the year ended December 31, 2009. The decrease in our operating cash burn can be attributed to the following factors: our strategic restructuring, initiated in June 2009, our decision to suspend the development of ANA773 for HCV and oncology and the relocation of our corporate headquarters to a smaller facility in July 2009.

Future Cash Requirements

We expect our cash burn to increase significantly in 2011 when compared to 2010 as we conduct our Phase IIb combination study for ANA598. In addition, we announced in October 2010 that we are resuming development of ANA773 for the treatment of hepatitis C. We plan to begin a Phase IIa combination study for ANA773 in the second quarter of 2011.

Over time we expect our development expenses to be substantial and to increase as we continue the advancement of our development programs. The lengthy process of completing clinical trials and seeking regulatory approval for our product candidates requires the expenditure of substantial resources. Any failure by us or delay in completing clinical trials, or in obtaining regulatory approvals, could cause our research and development expenses to increase and, in turn, have a material adverse effect on our results of operations.

Our future capital uses and requirements depend on numerous forward-looking factors. These factors may include but are not limited to the following:

- the progress of our clinical trials;
- the progress of our nonclinical development activities;
- our ability to establish and maintain strategic alliances;
- the costs involved in enforcing or defending patent claims and other intellectual property rights;
- the costs and timing of regulatory approvals;
- the costs of establishing or expanding manufacturing, sales and distribution capabilities;
- the costs related to development and manufacture of non-clinical, clinical and validation lots for regulatory and commercialization of drug supply;
- the success of the commercialization of ANA598, ANA773 or any other product candidates we may develop; and
- the extent to which we acquire or invest in other products, technologies and businesses.

Investment Portfolio

As of December 31, 2010, we have \$37.7 million of marketable securities consisting of money market funds, commercial paper, municipal bonds, U.S. government sponsored enterprise securities and corporate debt securities with maturities that range from one day to 27.4 months with an overall average months to maturity of 6.2 months. We have the ability to liquidate these marketable securities without restriction or penalty.

As of December 31, 2010, we performed a review of all of the securities in our portfolio with an unrealized loss position, to determine if any other-than-temporary impairments were required to be recorded. Factors considered in our assessment included but were not limited to the following: our ability and intent to hold the security until maturity; the number of months until the security's maturity, the number of quarters that each security was in an unrealized loss position, ratings assigned to each security by independent rating agencies, the magnitude of the unrealized loss compared to the face value of the security and other market conditions. No other-than-temporary impairments were identified as of December 31, 2010 related to securities currently in our portfolio. We also noted that none of the securities as of December 31, 2010 have been in an unrealized loss position for greater than one year.

As of December 31, 2010 we do not own any asset-backed securities or auction rate securities.

Cash Flows from Operating Activities and Investing Activities

Our consolidated statements of cash flows are summarized as follows (in thousands):

	For the Year Ended December 31,		
	2010	2009	2008
Net cash used in operating activities	<u>\$(16,988)</u>	<u>\$(24,229)</u>	<u>\$(28,288)</u>
Cash (used in) provided by investing activities			
Purchase of securities available-for-sale	\$(38,934)	\$(24,657)	\$ (8,806)
Proceeds from sale of securities available-for-sale	24,191	26,484	12,463
Purchase of property and equipment	(7)	(88)	(213)
Proceeds from disposal of property and equipment	<u>6</u>	<u>111</u>	<u>392</u>
Net cash (used in) provided by investing activities	<u>\$(14,744)</u>	<u>\$ 1,850</u>	<u>\$ 3,836</u>

We expect to continue to utilize cash and marketable securities to fund our operating activities as we continue to advance our wholly owned product candidates ANA598 and ANA773. We are not currently party to any development collaborations and therefore cash to fund future operations will most likely have to be obtained from one of the following sources: our current investment portfolio, the sale of equity securities, new strategic alliance agreements or other transactions, project financing or debt financing.

Cash Flows from Financing Activities

Our consolidated statements of cash flows are summarized as follows (in thousands):

	For the Year Ended December 31,		
	2010	2009	2008
Cash provided by financing activities			
Proceeds from exercise of stock options and employee stock purchase plan	\$ 158	\$ 385	\$259
Proceeds from equity financing, net of issuance costs	<u>34,694</u>	<u>16,015</u>	<u>—</u>
Net cash provided by financing activities	<u>\$34,852</u>	<u>\$16,400</u>	<u>\$259</u>

On June 1, 2010, we sold approximately 5.8 million registered shares of common stock to institutional investors for gross proceeds of approximately \$12.5 million. The

shares of common stock were at a purchase price of \$2.15 per share. The net proceeds related to this transaction were \$11.4 million. On October 20, 2010, we sold approximately 13.9 million registered shares of common stock to institutional and retail investors for gross proceeds of approximately \$25.0 million. The shares of common stock were at a purchase price of \$1.80 per share. The net proceeds related to this transaction were \$23.3 million. The proceeds from these equity financings are being utilized to fund operating activities and to advance ANA598 and ANA773 for the treatment of HCV.

Aggregate Contractual Obligations

The following summarizes our contractual obligations as of December 31, 2010 (in thousands):

<u>Contractual Obligations</u>	<u>Total</u>	<u>Less than 1 Year</u>	<u>2012 to 2013</u>	<u>2014 to 2015</u>	<u>Thereafter</u>
Operating leases(1)	\$324	\$296	\$ 28	\$ —	\$ —
Minimum royalty commitment	600	100	200	200	100
	<u>\$924</u>	<u>\$396</u>	<u>\$228</u>	<u>\$200</u>	<u>\$100</u>

(1) On February 28, 2011, we entered into a lease agreement with ARE-SD Region No. 31, LLC for the lease of 13,674 square feet of office and laboratory space in which the Company will continue to use for our headquarters and research and development facility. The lease replaces our expired sublease with Phenomix Corporation for the same space located in San Diego, California. Obligations associated with this lease are included in the table above.

We also enter into agreements with clinical sites and contract research organizations that conduct our clinical trials. We generally make payments to these entities based upon the number of subjects enrolled and the length of their participation in the trials. To date, the majority of our clinical costs have been related to the costs of subjects entering our clinical trials as well as the manufacturing of compounds to be used in our clinical trials. Costs associated with clinical trials will continue to vary as the trials go through their natural phases of enrollment and follow-up. The costs will also be influenced by the pace of the development activities, timing of the development activities and regulatory requirements associated with the conduct of our clinical trials. At this time, due to the risks inherent in the clinical trial process and given the early stage of development of our product development programs, we are unable to estimate with any certainty the total costs we will incur in the continued development of our product candidates for potential commercialization. Due to these same factors, we are unable to determine the anticipated completion dates for our current product development programs. Clinical development timelines, probability of success and development costs vary widely. As we continue our development programs, we anticipate that we will make determinations as to how much funding to direct to each program on an ongoing basis in response to the scientific and clinical success of each product candidate, as well as an ongoing assessment of the product

candidate's commercial potential. In addition, we cannot forecast with any degree of certainty whether any of our product candidates will be subject to future partnering, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our development plans and capital requirements. As a result, we cannot be certain when, or if, and to what extent we will receive cash inflows from the commercialization of our product candidates.

Fair Value Inputs

Fair value is a market-based measurement that is determined based on assumptions that market participants would use in pricing an asset or liability. See Notes 2 and 3 to the audited consolidated financial statements, which are included elsewhere in this Annual Report.

We value our marketable securities by using quoted market prices, broker or dealer quotations or alternative pricing sources with reasonable levels of price transparency. The types of securities valued based on quoted market prices in active markets include money market securities. We do not adjust the quoted price for such securities. The types of instruments valued based on quoted prices in markets that are not active, broker or dealer quotations, or alternative pricing sources with reasonable levels of price transparency include commercial paper, municipal bonds, U.S. treasury notes, U.S. government sponsored enterprise securities and corporate debt securities. The price for each security at the measurement date is sourced from an independent pricing vendor. Periodically, management assesses the reasonableness of these sourced prices by comparing them to the prices provided by our portfolio managers to derive the fair value of these financial instruments. Historically, we have not experienced significant deviation between the prices from the independent pricing vendor and our portfolio managers. Management assesses the inputs of the pricing in order to categorize the financial instruments into the appropriate hierarchy levels. The fair value of the common stock warrants, which may potentially be settled with cash and are therefore treated as a liability, is estimated using the Black-Scholes pricing model.

Off-Balance Sheet Arrangements

As of December 31, 2010, 2009 and 2008, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. In addition, we do not engage in trading activities involving non-exchange traded contracts. As such, we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in these relationships. We do not have relationships or transactions with persons or entities that derive benefits from their non-independent relationship with us or our related parties.

Item 7A. Quantitative and Qualitative Disclosure About Market Risk

Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because the majority of our investments are in short-term marketable securities. Due to the nature of our short-term investments, we believe that we are not subject to any material market risk exposure. We do not have any foreign currency or other derivative financial instruments.

Item 8. Financial Statements and Supplementary Data

The consolidated financial statements and related financial information required to be filed are indexed on page F-1 of this Annual Report on Form 10-K and are incorporated herein.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not Applicable.

Item 9A. Controls and Procedures**Management's Report on Internal Control Over Financial Reporting**

Evaluation of Disclosure Controls and Procedures: Our President and Chief Executive Officer and Vice President, Finance and Operations performed an evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934) as of the end of the period covered by this Annual Report. Based on that evaluation, our Chief Executive Officer and Vice President, Finance and Operations concluded that our disclosure controls and procedures were effective as of December 31, 2010 in providing them with material information related to the Company in a timely manner, as required to be disclosed in the reports the Company files under the Exchange Act.

Management's Annual Report on Internal Control over Financial Reporting: Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f).

Under the supervision and with the participation of our management, including our President and Chief Executive Officer and Vice President, Finance and Operations, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control —*

Integrated Framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2010.

The effectiveness of our internal control over financial reporting as of December 31, 2010 has been audited by Ernst & Young LLP, an independent registered public accounting firm.

Changes in Internal Control Over Financial Reporting: There was no significant change in our internal control over financial reporting that occurred during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of Anadys Pharmaceuticals, Inc.

We have audited Anadys Pharmaceuticals, Inc.'s internal control over financial reporting as of December 31, 2010, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Anadys Pharmaceuticals, Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Anadys Pharmaceuticals, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2010, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Anadys Pharmaceuticals, Inc. as of December 31, 2010 and 2009, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2010 of Anadys Pharmaceuticals, Inc. and our report dated March 4, 2011 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

San Diego, California
March 4, 2011

Item 9B. Other Information

Not applicable.

Part III

Certain information required by Part III of Form 10-K is omitted from this report because we expect to file a definitive proxy statement for our 2011 Annual Meeting of Stockholders (the Proxy Statement) within 120 days after the end of our fiscal year pursuant to Regulation 14A promulgated under the Securities Exchange Act of 1934, as amended, and the information included in the Proxy Statement is incorporated herein by reference to the extent provided below.

Item 10. Directors, Executive Officers and Corporate Governance

The information required by Item 10 of Form 10-K is incorporated by reference to the information under the headings “Election of Directors,” “Section 16(a) Beneficial Ownership Reporting Compliance,” “Audit Committee” and “Shareholder Communications with the Board of Directors” in our Proxy Statement.

Certain information required by Item 10 of Form 10-K regarding our executive officers is set forth in Item 1 of Part I of this Annual Report under the caption “Executive Officers of the Registrant.”

We have adopted a Code of Business Conduct and Ethics, which applies to all our directors, officers and employees, including our President and Chief Executive Officer and Vice President, Finance and Operations and all of our finance team. The Code of Business Conduct and Ethics is posted on our website, <http://www.anadyspharma.com> (under the “Investors — Corporate Governance” caption). In addition, we will provide to any person without charge, upon request, addressed to the Corporate Secretary at Anadys Pharmaceuticals, Inc., 5871 Oberlin Drive, Suite 200, San Diego, CA 92121, a copy of our Code of Business Conduct and Ethics. We intend to satisfy the disclosure requirement regarding any amendment to, or waiver of, a provision of the Code of Business Conduct and Ethics for our President and Chief Executive Officer and Vice President, Finance and Operations or persons performing similar functions, by posting such information on our website.

Item 11. Executive Compensation

The information required by Item 11 of Form 10-K is incorporated by reference to the information under the heading “Compensation of Executive Officers” and “Compensation of Directors” in our Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The following table summarizes our outstanding securities and securities available for future issuance under our equity compensation plans as of December 31, 2010. Security holders of the Company have approved the 2002 Equity Incentive

Plan, 2004 Equity Incentive Plan (2004 Plan), 2004 Non-Employee Directors' Stock Option Plan and 2004 Employee Stock Purchase Plan.

In connection with the hiring of certain executive officers during 2006, the Compensation Committee of our Board of Directors approved inducement grants of non-qualified stock options. These option awards were granted without security holder approval pursuant to NASDAQ Marketplace Rule 4350(i)(1)(A)(iv). Although these options were granted outside the 2004 Plan, they are subject to substantially identical terms and conditions as those contained in the 2004 Plan.

<u>Plan Category</u>	<u>(a) Number of Securities to be Issued Upon Exercise of Outstanding Options</u>	<u>(b) Weighted-Average Exercise Price of Outstanding Options</u>	<u>(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))</u>
Equity compensation plans approved by security holders	6,820,466	\$3.25	3,027,533
Equity compensation plans not approved by security holders . .	<u>200,000</u>	\$3.00	<u>—</u>
Total	<u>7,020,466</u>		<u>3,027,533</u>

The additional information required by Item 12 of Form 10-K related to security ownership of certain beneficial owners and management is incorporated herein by reference to the information under the heading "Security Ownership of Certain Beneficial Owners and Management" in our Proxy Statement.

Item 13. *Certain Relationships and Related Transactions, and Director Independence*

The information required by Item 13 of Form 10-K related to transactions with related persons, promoters and certain control persons, if any, is incorporated herein by reference to the information under the heading "Certain Transactions" in our Proxy Statement. The information required by Item 13 of Form 10-K relating to director independence is incorporated herein by reference to the information under the heading "Election of Directors" in our Proxy Statement.

Item 14. *Principal Accounting Fees and Services*

The information required by Item 14 of Form 10-K is incorporated herein by reference to the information under the heading "Ratification of Selection of Independent Registered Accounting Firm" in our Proxy Statement.

Part IV

Item 15. Exhibits and Financial Statement Schedules

(a) The following financial statements, financial statements schedules and exhibits are filed as part of this report or incorporated herein by reference:

(1) Financial Statements. See index to consolidated financial statements on page F-1.

(2) Financial Statement Schedules. All financial statements schedules for which provision is made in Regulation S-X are omitted because they are not required under the related instructions, are inapplicable, or the required information is given in the financial statements, including the notes thereto.

(3) Exhibits.

<u>Exhibit Number</u>	<u>Exhibit Description</u>	<u>Incorporated by Reference or Attached Hereto</u>
3.1	Form of Amended and Restated Certificate of Incorporation of the Registrant	Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q (SEC File No. 000-50632) filed on May 14, 2004.
3.2	Amended and Restated Bylaws of the Registrant	Incorporated by reference to the Registrant's Current Report on Form 8-K (SEC File No. 000-50632) filed on December 5, 2007.
4.1	Form of Specimen Common Stock Certificate	Incorporated by reference to the Registrant's Registration Statement on Form S-1 (SEC File No. 333-110528) filed on March 18, 2004.
4.2	Form of Warrant	Incorporated by reference to the Registrant's Current Report on Form 8-K (SEC File No. 000-50632) filed on June 4, 2009.
10.1#	2002 Equity Incentive Plan	Incorporated by reference to Exhibit 10.3 in the Registrant's Registration Statement on Form S-1 (SEC File No. 333-110528) filed on November 14, 2003.
10.2#	Form of Stock Option Agreement under 2002 Equity Incentive Plan	Incorporated by reference to Exhibit 10.4 in the Registrant's Registration Statement on Form S-1 (SEC File No. 333-110528) filed on November 14, 2003.
10.3#	2004 Equity Incentive Plan	Incorporated by reference to Exhibit 10.5 in the Registrant's Registration Statement on Form S-1 (SEC File No. 333-110528) filed on March 18, 2004.
10.4#	Form of Stock Option Agreement under 2004 Equity Incentive Plan	Incorporated by reference to Exhibit 10.6 in the Registrant's Registration Statement on Form S-1 (SEC File No. 333-110528) filed on March 18, 2004.

<u>Exhibit Number</u>	<u>Exhibit Description</u>	<u>Incorporated by Reference or Attached Hereto</u>
10.5#	Form of Amendment to Stock Option Agreement Under 2004 Equity Incentive Plan, applicable to Non-Employee Director grants	Incorporated by reference to Exhibit 10.5 in the Registrant's Annual Report on Form 10-K (SEC File No. 000-50632) filed on March 3, 2009.
10.6#	2004 Employee Stock Purchase Plan	Incorporated by reference to Exhibit 10.7 in the Registrant's Registration Statement on Form S-1 (SEC File No. 333-110528) filed on March 18, 2004.
10.7#	Form of Offering Document under the 2004 Employee Stock Purchase Plan	Incorporated by reference to Exhibit 10.8 in the Registrant's Registration Statement on Form S-1 (SEC File No. 333-110528) filed on March 18, 2004.
10.8#	Form of Indemnification Agreement by and between the Registrant and each of its directors and officers	Incorporated by reference to Exhibit 10.11 in the Registrant's Registration Statement on Form S-1 (SEC File No. 333-110528) filed on November 14, 2003.
10.9#	Form of Stock Option Agreement Under 2004 Non-Employee Directors' Stock Option Plan	Incorporated by reference to Exhibit 10.10 in the Registrant's Registration Statement on Form S-1 (SEC File No. 333-110528) filed on March 18, 2004.
10.10#	Terms of Employment dated February 1, 2001 by and between the Registrant and Steve Worland, Ph.D.	Incorporated by reference to Exhibit 10.27 in the Registrant's Registration Statement on Form S-1 (SEC File No. 333-110528) filed on November 14, 2003.
10.11#	Terms of Employment dated October 2, 2001 by and between the Registrant and Elizabeth E. Reed	Incorporated by reference to Exhibit 10.30 in the Registrant's Registration Statement on Form S-1 (SEC File No. 333-110528) filed on March 18, 2004.
10.12#	Form of Inducement Stock Option Agreement	Incorporated by reference to Exhibit 10.42 in the Registrant's Current Report on Form 8-K (SEC File No. 000-50632) filed on September 25, 2006.
10.13#	Terms of Employment dated June 21, 2006 by and between the registrant and James L. Freddo, M.D.	Incorporated by reference to Exhibit 10.21 in the Registrant's Annual Report on Form 10-K (SEC File No. 000-50632) filed on March 5, 2008.
10.14#	Amended and Restated 2004 Non-Employee Directors' Stock Option Plan	Incorporated by reference to Exhibit 10.24 in the Registrant's Quarterly Report on Form 10-Q (SEC File No. 000-50632) filed on May 1, 2008.
10.15	Sub-lease agreement dated June 18, 2009 by and between the Registrant and Phenomix Corporation	Incorporated by reference to Exhibit 10.24 in the Registrant's Quarterly Report on Form 10-Q (SEC File No. 000-50632) filed on July 31, 2009.
10.16#	Terms of Employment dated July 1, 2009 for Peter T. Slover	Incorporated by reference to Exhibit 10.26 in the Registrant's Quarterly Report on Form 10-Q (SEC File No. 000-50632) filed on July 31, 2009.

<u>Exhibit Number</u>	<u>Exhibit Description</u>	<u>Incorporated by Reference or Attached Hereto</u>
10.17#	Anadys Pharmaceuticals, Inc. Executive Officer Bonus Plan	Incorporated by reference to Exhibit 10.29 in the Registrant's Quarterly Report on Form 10-Q (SEC File No. 000-50632) filed on October 30, 2009.
10.18#	Amended and Restated Severance and Change in Control Agreement dated January 24, 2011 by and between the Registrant and James L. Freddo, M.D.	Incorporated by reference to Exhibit 10.27 in the Registrant's Current Report on Form 8-K (SEC File No. 000-50632) filed on January 24, 2011.
10.19#	Amended and Restated Severance and Change in Control Agreement dated February 6, 2011 by and between the Registrant and Stephen T. Worland, Ph.D.	Attached Hereto.
10.20#	Amended and Restated Severance and Change in Control Agreement dated January 24, 2011 by and between the Registrant and Elizabeth E. Reed	Attached Hereto.
10.21#	Amended and Restated Severance and Change in Control Agreement dated January 24, 2011 by and between the Registrant and Peter T. Slover	Attached Hereto.
10.22	First Amendment to Lease dated December 20, 2010 by and between the Registrant, ARE-SD Region No. 31, LLC, and Phenomix Corporation	Attached Hereto.
10.23	Lease dated February 28, 2011 by and between the Registrant and ARE-SD Region No. 31, LLC.	Attached Hereto.
21.1	List of Subsidiaries of the Registrant	Incorporated by reference to Exhibit 21.1 in the Registrant's Registration Statement on Form S-1 (SEC File No. 333-110528) filed on November 14, 2003.
23.1	Consent of Independent Registered Public Accounting Firm	Attached Hereto.
31.1	Certification of President and Chief Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities Act of 1934, as amended	Attached Hereto.
31.2	Certification of Vice President, Finance and Operations pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities Act of 1934, as amended	Attached Hereto.
32.1	Certifications of President and Chief Executive Officer and Vice President, Finance and Operations pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Attached Hereto.

Indicates management contract or compensatory plan.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on the 4th day of March, 2011.

ANADYS PHARMACEUTICALS, INC.

By: /s/ STEPHEN T. WORLAND, PH.D.

Stephen T. Worland, Ph.D.

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Stephen T. Worland, Ph.D. and Peter T. Slover, and each of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place, and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and any other documents in connection therewith, and to file the same, with all exhibits thereto, 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 connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them or their or his substitute or substituted, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1934, as amended, this report has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ STEPHEN T. WORLAND, PH.D.</u> Stephen T. Worland, Ph.D.	President, Chief Executive Officer and Director (<i>Principal Executive Officer</i>)	March 4, 2011
<u>/s/ PETER T. SLOVER</u> Peter T. Slover	Vice President, Finance and Operations (<i>Principal Financial and Accounting Officer</i>)	March 4, 2011

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ STELIOS PAPADOPOULOS, PH.D.</u> Stelios Papadopoulos, Ph.D.	Chairman of the Board	March 4, 2011
<u>/s/ MARK G. FOLETTA</u> Mark G. Foletta	Director	March 4, 2011
<u>/s/ MARIOS FOTIADIS</u> Marios Fotiadis	Director	March 4, 2011
<u>/s/ JAMES L. FREDDO</u> James L. Freddo	Director	March 4, 2011
<u>/s/ KLEANTHIS G. XANTHOPOULOS, PH.D.</u> Kleanthis G. Xanthopoulos, Ph.D.	Director	March 4, 2011

[THIS PAGE INTENTIONALLY LEFT BLANK]

ANADYS PHARMACEUTICALS, INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	<u>Page</u>
Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets as of December 31, 2010 and 2009	F-3
Consolidated Statements of Operations for each of the years ended December 31, 2010, 2009 and 2008	F-4
Consolidated Statements of Stockholders' Equity for each of the years ended December 31, 2010, 2009 and 2008	F-5
Consolidated Statements of Cash Flows for each of the years ended December 31, 2010, 2009 and 2008	F-6
Notes to Consolidated Financial Statements	F-7

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of Anadys Pharmaceuticals, Inc.

We have audited the accompanying consolidated balance sheets of Anadys Pharmaceuticals, Inc. as of December 31, 2010 and 2009, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2010. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Anadys Pharmaceuticals, Inc. at December 31, 2010 and 2009, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2010, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Anadys Pharmaceuticals, Inc.'s internal control over financial reporting as of December 31, 2010, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 4, 2011 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

San Diego, California
March 4, 2011

ANADYS PHARMACEUTICALS, INC.
CONSOLIDATED BALANCE SHEETS

	<u>December 31, 2010</u>	<u>December 31, 2009</u>
	(In thousands, except share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 7,617	\$ 4,497
Securities available-for-sale	30,367	15,993
Prepaid expenses and other current assets	<u>1,319</u>	<u>559</u>
Total current assets	39,303	21,049
Property and equipment, net	234	626
Other assets	<u>—</u>	<u>60</u>
Total assets	<u>\$ 39,537</u>	<u>\$ 21,735</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 251	\$ 740
Accrued expenses	2,719	2,643
Common stock warrant liability	<u>1,881</u>	<u>3,897</u>
Total current liabilities	4,851	7,280
Other long-term liabilities	13	26
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.001 par value; 10,000,000 shares authorized at December 31, 2010 and December 31, 2009; no shares issued and outstanding at December 31, 2010 and December 31, 2009	—	—
Common stock, \$0.001 par value; 90,000,000 shares authorized at December 31, 2010 and December 31, 2009; 57,141,223 and 37,341,957 shares issued and outstanding at December 31, 2010 and December 31, 2009, respectively	57	37
Additional paid-in capital	334,298	297,687
Accumulated other comprehensive (loss) gain	(1)	37
Accumulated deficit	<u>(299,681)</u>	<u>(283,332)</u>
Total stockholders' equity	34,673	14,429
Total liabilities and stockholders' equity	<u>\$ 39,537</u>	<u>\$ 21,735</u>

See accompanying notes to consolidated financial statements.

ANADYS PHARMACEUTICALS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

	<u>For the Year Ended December 31,</u>		
	<u>2010</u>	<u>2009</u>	<u>2008</u>
	(In thousands, except net loss per share)		
Operating Expenses:			
Research and development	\$ 12,026	\$ 19,494	\$ 25,993
General and administrative	<u>6,478</u>	<u>8,243</u>	<u>8,109</u>
Total operating expenses	<u>18,504</u>	<u>27,737</u>	<u>34,102</u>
Loss from operations	(18,504)	(27,737)	(34,102)
Other income (expense):			
Interest income	106	478	1,482
Gain (loss) from valuation of common stock warrant liability	2,016	(151)	—
Other, net	<u>33</u>	<u>132</u>	<u>218</u>
Total other income (expense), net	<u>2,155</u>	<u>459</u>	<u>1,700</u>
Net loss	<u>\$(16,349)</u>	<u>\$(27,278)</u>	<u>\$(32,402)</u>
Net loss per share, basic and diluted	<u>\$ (0.38)</u>	<u>\$ (0.81)</u>	<u>\$ (1.13)</u>
Shares used in calculating net loss per share, basic and diluted	<u>43,570</u>	<u>33,775</u>	<u>28,750</u>

2010 Annual Report

See accompanying notes to consolidated financial statements.

ANADYS PHARMACEUTICALS, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Preferred Stock		Common stock		Additional Paid-in Capital <small>(In thousands, except share data)</small>	Accumulated Other Comprehensive Gain (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance at December 31, 2007	—	\$—	28,696,948	\$29	\$279,221	\$ 81	\$(223,652)	\$ 55,679
Issuance of common stock pursuant to the exercise of stock options and warrants	—	—	36,567	—	106	—	—	106
Issuance of common stock pursuant to the employee stock purchase plan	—	—	83,248	—	153	—	—	153
Compensation related to stock options and warrants issued to non-employees	—	—	—	—	66	—	—	66
Share-based compensation expense including forfeitures	—	—	—	—	2,751	—	—	2,751
Comprehensive loss:								
Unrealized loss on securities available for sale	—	—	—	—	—	(528)	—	(528)
Net loss	—	—	—	—	—	—	(32,402)	(32,402)
Comprehensive loss	—	—	—	—	—	—	—	(32,930)
Balance at December 31, 2008	—	\$—	28,816,763	\$29	\$282,297	\$(447)	\$(256,054)	\$ 25,825
Issuance of common stock pursuant to the exercise of stock options and warrants	—	—	84,465	—	232	—	—	232
Issuance of common stock pursuant to the employee stock purchase plan	—	—	82,729	—	153	—	—	153
Issuance of common stock associated with equity financing, net of issuance costs	—	—	8,358,000	8	16,007	—	—	16,015
Fair value of common stock warrants issued in connection with equity financing	—	—	—	—	(3,746)	—	—	(3,746)
Compensation related to stock options and warrants issued to non-employees	—	—	—	—	125	—	—	125
Share-based compensation expense including forfeitures	—	—	—	—	2,619	—	—	2,619
Comprehensive loss:								
Unrealized gain on securities available for sale	—	—	—	—	—	484	—	484
Net loss	—	—	—	—	—	—	(27,278)	(27,278)
Comprehensive loss	—	—	—	—	—	—	—	(26,794)
Balance at December 31, 2009	—	\$—	37,341,957	\$37	\$297,687	\$ 37	\$(283,332)	\$ 14,429
Issuance of common stock pursuant to the exercise of stock options	—	—	21,619	—	47	—	—	47
Issuance of common stock pursuant to the employee stock purchase plan	—	—	74,804	—	111	—	—	111
Compensation related to stock options and warrants issued to non-employees	—	—	19,702,843	20	34,674	—	—	34,694
Share-based compensation expense including forfeitures	—	—	—	—	18	—	—	18
Comprehensive loss:								
Unrealized loss on securities available for sale	—	—	—	—	1,761	—	—	1,761
Net loss	—	—	—	—	—	(38)	—	(38)
Comprehensive loss	—	—	—	—	—	—	(16,349)	(16,349)
Balance at December 31, 2010	—	\$—	57,141,223	\$57	\$334,298	\$ (1)	\$(299,681)	\$ 34,673

ANADYS PHARMACEUTICALS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

2010 Annual Report

	For the Year Ended December 31,		
	2010	2009	2008
	(In thousands)		
Cash Flows from Operating Activities:			
Net loss	\$(16,349)	\$(27,278)	\$(32,402)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	397	853	1,141
Share-based compensation	1,761	2,619	2,751
Amortization of premium/discount on securities available-for-sale	331	155	157
(Gain) loss on the sale of available-for-sale securities	—	(31)	24
Compensation related to stock option issuances to non-employees	18	96	16
(Gain) loss on valuation of common stock warrant liability	(2,016)	151	—
Rent expense related to warrants issued in connection with operating lease of the Company's former facility	—	29	50
Gain from disposal of property and equipment	(4)	(26)	(149)
Changes in operating assets and liabilities:			
Prepaid expenses and other current assets	(760)	1,643	(1,198)
Other assets	60	—	1,320
Accounts payable	(489)	182	(526)
Accrued expenses	76	(2,180)	1,057
Deferred rent	—	(348)	(584)
Other liabilities	(13)	(94)	55
Net cash used in operating activities	(16,988)	(24,229)	(28,288)
Cash Flows from Investing Activities:			
Purchase of securities available-for-sale	(38,934)	(24,657)	(8,806)
Proceeds from sale and maturity of securities available-for-sale	24,191	26,484	12,463
Purchase of property and equipment	(7)	(88)	(213)
Proceeds from the sale of property and equipment	6	111	392
Net cash (used in) provided by investing activities	(14,744)	1,850	3,836
Cash Flows from Financing Activities:			
Proceeds from exercise of stock options and employee stock purchase plan	158	385	259
Proceeds from equity financings, net of issuance costs	34,694	16,015	—
Net cash provided by financing activities	34,852	16,400	259
Net increase (decrease) in cash and cash equivalents	3,120	(5,979)	(24,193)
Cash and cash equivalents at beginning of year	4,497	10,476	34,669
Cash and cash equivalents at end of year	<u>\$ 7,617</u>	<u>\$ 4,497</u>	<u>\$ 10,476</u>
Supplemental Disclosure of Non-Cash Investing and Financing Activities:			
Initial recognition of the fair value of common stock warrant liability upon issuance of warrants	<u>\$ —</u>	<u>\$ 3,746</u>	<u>\$ —</u>
Unrealized (loss) gain on securities available-for-sale	<u>\$ (38)</u>	<u>\$ 484</u>	<u>\$ (528)</u>

See accompanying notes to consolidated financial statements.

ANADYS PHARMACEUTICALS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Summary of Significant Accounting Policies

Organization and Business

Anadys Pharmaceuticals, Inc. (Anadys or the Company) is a biopharmaceutical company dedicated to improving patient care by developing novel medicines for the treatment of hepatitis C. The Company believes hepatitis C represents a large and significant unmet medical need. The Company's objective is to contribute to an improved treatment outcome for patients with this serious disease.

The Company is currently focusing its efforts on the development of ANA598, a direct-acting antiviral (DAA) for the treatment of hepatitis C. The Company is also making plans to resume the clinical development of ANA773, an oral, small-molecule inducer of endogenous interferons that acts via the Toll-like receptor 7, or TLR7, pathway in hepatitis C.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries, Anadys Pharmaceuticals Europe GmbH and Anadys Development Limited. All significant intercompany accounts and transactions have been eliminated. In 2003, the Company discontinued its Anadys Pharmaceuticals Europe GmbH operations and intends to dissolve that entity. Anadys Development Limited was established in 2005 to serve as a legal representative of the Company for conducting clinical trials in Europe. As of and for the year ended December 31, 2010, neither Anadys Pharmaceuticals Europe GmbH nor Anadys Development Limited had active operations.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles (GAAP) in the United States requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ materially from those estimates.

Cash and Cash Equivalents

Cash and cash equivalents are comprised of highly liquid investments with an original maturity of less than three months when purchased and are readily convertible without prior notice or penalty to known amounts of cash.

Securities Available-for-Sale

Investments with an original maturity of more than three months when purchased have been classified by management as securities available-for-sale. Such

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

investments are carried at fair value, with unrealized gains and losses included as a component of accumulated other comprehensive gain (loss) in stockholders' equity. Realized gains and losses and declines in value judged to be other-than-temporary (of which there have been none to date) on available-for-sale securities are included in interest income. The cost of securities sold is based on the specific-identification method. The Company views its available-for-sale securities as available for use in current operations. Accordingly, the Company has classified all investments as short-term, even though the stated maturity date may be one year or more beyond the current balance sheet date.

Fair Value of Financial Instruments

The carrying amount of cash, cash equivalents, securities available-for-sale, accounts payable and accrued expenses are considered to be representative of their respective fair value because of the short-term nature of those items.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to a significant concentration of credit risk consist primarily of cash, cash equivalents and securities available-for-sale. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. Management, however, believes the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held. Additionally, the Company has established guidelines regarding diversification of its investments and their maturities, which are designed to maintain safety and liquidity.

Property and Equipment

Property and equipment are stated at cost and depreciated over the estimated useful lives of the assets (ranging from three to five years) using the straight-line method. Leasehold improvements are amortized over the estimated useful life of the asset or the lease term, whichever is shorter.

Impairment of Long-Lived Assets

If indicators of impairment exist, the Company assesses the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through undiscounted future operating cash flows. If impairment is indicated, the Company measures the amount of such impairment by comparing the fair value of the asset to the carrying value of the asset and records the impairment as a reduction in the carrying value of the related asset and a charge to operating results. The Company has not recognized any impairment loss for the periods ended December 31, 2010, 2009 and 2008.

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Research and Development

During 2010, 2009 and 2008, research and development expenses consisted primarily of costs associated with clinical development of the Company's product candidates. Research and development expenses may include external costs such as fees paid to clinical research organizations, clinical trial investigators, contract research organizations, drug substance and drug product manufacturers and consultants. Research and development expenses may also include internal costs such as compensation, supplies, materials, an allocated portion of facilities costs, an allocated portion of information systems support personnel and depreciation.

Accumulated Other Comprehensive Gain (Loss)

All components of comprehensive gain (loss), including net income (loss), are reported in the financial statements in the period in which they are recognized. Comprehensive income (loss) is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources. Net income (loss) and other comprehensive income (loss), including unrealized gains and losses on investments and foreign currency translation adjustments, are reported, net of their related tax effect, to arrive at comprehensive income (loss).

Share-Based Compensation

Share-based compensation expense for options granted to employees and non-employee directors is estimated at the grant date based on the award's fair value as calculated using a Black-Scholes pricing model and the portion that is ultimately expected to vest is recognized as expense on a straight-line basis over the requisite service period. The Company accounts for compensation expense for options granted to non-employees based on the fair value of the options issued using the Black-Scholes pricing model and is periodically re-measured as the underlying options vest. The Company records share-based compensation as components of either research and development expense or general and administrative expense.

Net Loss Per Share

Basic loss per share (EPS) is calculated by dividing the net loss by the weighted-average number of common shares outstanding for the period, without consideration for common stock equivalents. Diluted EPS is computed by dividing the net loss by the weighted-average number of common stock equivalents outstanding for the period determined using the treasury-stock method. For purposes of this calculation, common stock subject to repurchase by the Company, preferred stock, options and warrants are considered to be common stock equivalents and are only included in the calculation of diluted earnings per share when their effect is dilutive.

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Common stock equivalents from stock options and warrants of approximately 10.0 million, 10.1 million and 6.6 million were excluded from the calculation of net loss per share for the years ended December 31, 2010, 2009 and 2008, respectively, because the effect would be antidilutive.

Subsequent Events

The Company evaluated all events or transactions that occurred after the balance sheet date of December 31, 2010 through the date it issued these financial statements. No subsequent events were identified requiring additional disclosure in the notes to these financial statements.

2. Securities Available-for-Sale

Securities available-for-sale consisted of the following as of December 31, 2010 and 2009, respectively (in thousands):

	<u>December 31, 2010</u>			
	<u>Amortized Cost</u>	<u>Unrealized</u>		<u>Market Value</u>
		<u>Gain</u>	<u>Loss</u>	
Commercial paper	\$10,018	\$—	\$(1)	\$10,017
Municipal bonds	1,654	—	—	1,654
U.S. government sponsored enterprise securities	15,983	7	(5)	15,985
Corporate debt securities	<u>2,713</u>	<u>—</u>	<u>(2)</u>	<u>2,711</u>
	<u>\$30,368</u>	<u>\$ 7</u>	<u>\$(8)</u>	<u>\$30,367</u>

	<u>December 31, 2009</u>			
	<u>Amortized Cost</u>	<u>Unrealized</u>		<u>Market Value</u>
		<u>Gain</u>	<u>Loss</u>	
Commercial paper	\$ 2,199	\$—	\$—	\$ 2,199
Municipal bonds	1,026	—	—	1,026
U.S. treasury notes	2,048	—	(1)	2,047
U.S. government sponsored enterprise securities	9,127	8	(5)	9,130
Corporate debt securities	<u>1,556</u>	<u>35</u>	<u>—</u>	<u>1,591</u>
	<u>\$15,956</u>	<u>\$43</u>	<u>\$(6)</u>	<u>\$15,993</u>

2010 Annual Report

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The amortized cost and estimated fair value of the Company securities available-for-sale by contractual maturity as of December 31, 2010 and 2009 are shown below (in thousands):

	December 31, 2010			
	Amortized Cost	Unrealized		Market Value
		Gain	Loss	
Within one year	\$23,731	\$2	\$(5)	\$23,728
After one year	6,637	5	(3)	6,639
	<u>\$30,368</u>	<u>\$7</u>	<u>\$(8)</u>	<u>\$30,367</u>

	December 31, 2009			
	Amortized Cost	Unrealized		Market Value
		Gain	Loss	
Within one year	\$15,956	\$43	\$(6)	\$15,993
After one year	—	—	—	—
	<u>\$15,956</u>	<u>\$43</u>	<u>\$(6)</u>	<u>\$15,993</u>

As of December 31, 2010, the Company performed a review of all of the securities in its portfolio with an unrealized loss position to determine if any other-than-temporary impairments were required to be recorded. Factors considered in the Company's assessment included, but were not limited to the following: the Company's ability and intent to hold the security until maturity; the number of months until the security's maturity, the number of quarters that each security has been in an unrealized loss position, ratings assigned to each security by independent rating agencies, the magnitude of the unrealized loss compared to the face value of the security and other market conditions. No other-than-temporary impairments were identified as of December 31, 2010 related to securities currently in the Company's portfolio. The Company also noted that none of the securities as of December 31, 2010 have been in an unrealized loss position for greater than one year.

3. Fair Value Measurements

As of December 31, 2010, the Company has \$37.7 million of marketable securities consisting of money market funds, commercial paper, municipal bonds, U.S. government sponsored enterprise securities and corporate debt securities with maturities that range from 1 day to 27.4 months with an overall average time to maturity of 6.2 months. The Company has the ability to liquidate these investments without restriction. The Company determines fair value for marketable securities with Level 1 inputs through quoted market prices. The Company determines fair value for marketable securities with Level 2 inputs through broker or dealer quotations or alternative pricing sources with reasonable levels of price transparency. The

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Company's Level 2 marketable securities have been initially valued at the transaction price and subsequently valued, at the end of each reporting period, typically utilizing third party pricing services or other market observable data. The pricing services utilize industry standard valuation models, including both income and market based approaches and observable market inputs to determine value. These observable market inputs include reportable trades, benchmark yields, credit spreads, broker/dealer quotes, bids, offers, and other industry and economic events. The Company's Level 3 inputs are unobservable inputs based on the Company's assessment that market participants would use in pricing the instruments.

On June 3, 2009, the Company sold warrants to purchase 2.9 million shares of common stock to institutional investors as part of an equity financing. The Company accounts for the common stock warrants which may potentially be settled with cash as a liability. See additional discussion relating to the forms of these warrants at Note 10. The Company determines fair value for the common stock warrants with Level 3 inputs through a Black-Scholes pricing model.

There have been no transfers of assets or liabilities between the fair value measurement classifications for the years ended December 31, 2010 and 2009.

The following table presents the Company's assets and liabilities that are measured at fair value on a recurring basis as of December 31, 2010 (in thousands):

Description	Fair Value Measurements at Reporting Date Using			
	December 31, 2010	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Money market funds	\$ 475	\$475	\$ —	\$ —
Commercial paper	16,916	—	16,916	—
Municipal bonds	1,654	—	1,654	—
U.S. government sponsored enterprise securities	15,985	—	15,985	—
Corporate debt securities	<u>2,711</u>	<u>—</u>	<u>2,711</u>	<u>—</u>
Total financial assets	<u>\$37,741</u>	<u>\$475</u>	<u>\$37,266</u>	<u>\$ —</u>
Liabilities:				
Common stock warrants	<u>\$ 1,881</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$1,881</u>
Total financial liabilities	<u>\$ 1,881</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$1,881</u>

2010 Annual Report

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company reassesses the fair value of the common stock warrants at each reporting date utilizing a Black-Scholes pricing model. The following inputs were utilized in the Black-Scholes pricing model at December 31, 2010 and 2009:

	For the Year Ended December 31,	
	2010	2009
Risk-free interest rate	1.02%	2.69%
Dividend yield	0.00%	0.00%
Volatility factors of the expected market price of the Company's common stock	92.99%	93.82%
Weighted-average expected life of warrant (years)	3.42	4.42

As a result of the Company's reassessment of the fair value of the common stock warrants, the Company recorded a gain of \$2.0 million for the year ended December 31, 2010. The Company recorded a loss of \$0.2 million for the year ended December 31, 2009. The reassessment of the fair value of the common stock warrants is reflected in the Company's consolidated Statement of Operations as a component of other income (expense), net.

The following table is a roll forward of the fair value of the common stock warrants, as to which fair value is determined by Level 3 inputs (in thousands):

	For the Year Ended December 31,	
	2010	2009
Beginning balance	\$3,897	\$ —
Purchases, issuances, and settlements	—	3,746
Realized gain (loss) included in net loss	<u>2,016</u>	<u>(151)</u>
Ending balance	<u>\$1,881</u>	<u>\$3,897</u>

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

4. Property and Equipment

Property and equipment consist of the following (in thousands):

	As of December 31,	
	2010	2009
Furniture and fixtures	\$ 41	\$ 41
Equipment	3,885	3,914
Computers and software	1,392	1,399
Leasehold improvements	<u>30</u>	<u>30</u>
	5,348	5,384
Less accumulated depreciation and amortization . . .	<u>(5,114)</u>	<u>(4,758)</u>
	<u>\$ 234</u>	<u>\$ 626</u>

Depreciation and amortization expense relating to property and equipment for the years ended December 31, 2010, 2009 and 2008 was \$0.4 million, \$0.9 million and \$1.1 million, respectively.

5. Equity Financings

On June 1, 2010, the Company sold approximately 5.8 million registered shares of common stock to institutional investors for gross proceeds of approximately \$12.5 million. The shares of common stock were at a purchase price of \$2.15 per share. The net proceeds related to this transaction were \$11.4 million.

On October 20, 2010, the Company sold approximately 13.9 million registered shares of common stock to institutional and retail investors for gross proceeds of approximately \$25.0 million. The shares of common stock were at a purchase price of \$1.80 per share. The net proceeds to the Company related to this transaction were \$23.3 million.

6. Restructuring

On June 3, 2009, the Company initiated a strategic restructuring to focus its operations on the development of ANA598, in particular a Phase IIa study of ANA598 in combination with interferon and ribavirin. The strategic restructuring resulted in a reduction in the Company's workforce of approximately 40%. The Company incurred a cash charge of \$1.3 million for the year ended December 31, 2009, which was included in operating expenses, for cash severance, benefits and outplacement services in connection with the workforce reduction. In addition, the Company incurred a noncash charge of \$0.4 million associated with the modification of stock options for individuals included in the strategic restructuring. All payments related to this strategic restructuring have been completed as of December 31, 2010.

2010 Annual Report

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

7. Qualifying Therapeutic Discovery Project

The Company submitted applications for qualified investments for ANA598 and ANA773 in a qualifying therapeutic discovery project under section 48D of the Internal Revenue Code. In October 2010, the Company received notification of grants in the amount of \$0.5 million being approved. The Section 48D grants are recorded as an offset to research and development expense for the year ended December 31, 2010.

8. Other Balance Sheet Captions

	As of December 31,	
	<u>2010</u>	<u>2009</u>
Prepaid expenses and other current assets consist of the following (in thousands):		
Prepaid insurance	\$ 181	\$208
Interest receivable	150	138
Section 48D grant	489	—
Tenant deposit	30	—
Other prepaid expenses	<u>469</u>	<u>213</u>
	<u>\$1,319</u>	<u>\$559</u>

	As of December 31,	
	<u>2010</u>	<u>2009</u>
Other assets consist of the following (in thousands):		
Note receivable	\$—	\$30
Tenant deposit	<u>—</u>	<u>30</u>
	<u>\$—</u>	<u>\$60</u>

2010 Annual Report

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	<u>As of December 31,</u>	
	<u>2010</u>	<u>2009</u>
Accrued expenses consist of the following (in thousands):		
Accrued personnel costs	\$ 322	\$ 320
Accrued employee bonus	1,076	988
Accrued drug development	680	708
Accrued legal and patent costs	98	243
Accrued facility costs	14	20
Accrued severance costs associated with the 2009 strategic restructuring	—	52
Other accrued expenses	<u>529</u>	<u>312</u>
	<u>\$2,719</u>	<u>\$2,643</u>

9. Commitments and Contingencies

On February 28, 2011, the Company entered into a lease agreement with ARE-SD Region No. 31, LLC for the lease of 13,674 square feet which the Company uses for its headquarters and research and development facility. This lease replaces the Company's expired sublease for the same space located in San Diego, California. The effective term of the 12 month lease commenced on February 1, 2011. Under the terms of the lease the Company will receive 1.5 months of free base rent. With the exception of the 1.5 months during which the Company receives free base rent, the monthly base rent during the term of the lease will be \$0.03 million. The lease also provides for additional payments, including common area maintenance charges, taxes, maintenance and utilities. Gross rent expense for the years ended December 31, 2010, 2009 and 2008 was approximately \$0.4 million, \$1.4 million and \$2.1 million, respectively.

Future minimum lease payments under facility leases are as follows as of December 31, 2010 (in thousands):

2011	\$296
2012	<u>28</u>
	<u>\$324</u>

10. Stockholders' Equity

Warrants

As of December 31, 2010, the Company had outstanding warrants to purchase 2.9 million shares of common stock with an average exercise price of \$2.78. These

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

warrants expire at various times between December 17, 2012 and June 3, 2014. On June 3, 2009, the Company sold warrants to purchase 2.9 million shares of common stock to institutional investors as part of an equity financing. Each warrant has an exercise price of \$2.75 per share, is exercisable 6 months after issuance and will expire five years from the date of issuance. The warrants included in this transaction contain a “fundamental change” provision, which may in certain circumstances allow the common stock warrants to be redeemed for cash at an amount equal to the Black-Scholes Value, as defined in the warrants. In addition, the warrants include a “failure to timely deliver shares” provision, which may require the Company to pay cash to the warrant holder in certain circumstances as defined in the warrants. Accordingly, the common stock warrants are recorded as a liability and then marked to market each period through earnings in other income (expense). See a discussion on the fair value of the common stock warrants at Note 3.

Stock Options

In 2002, the Company adopted the 2002 Equity Incentive Plan (the 2002 Plan). In connection with the adoption of the 2002 Plan, the Company’s 1994 Stock Option Plan and 1998 Equity Incentive Plan (collectively, the “Prior Plans”) were amended and restated into the 2002 Plan. All options that were previously granted under the Prior Plans became governed by the 2002 Plan and the Prior Plans no longer existed as individual plans. The 2002 Plan provided for the issuance of incentive stock options to officers and other employees of the Company and non-qualified stock options, awards of stock and direct stock purchase opportunities to directors, officers, employees and consultants of the Company.

During March 2004 upon the effectiveness of the Company’s initial public offering (IPO), the 2004 Equity Incentive Plan (the 2004 Plan) was adopted. The initial share reserve under the 2004 Plan was equal to the number of shares of common stock reserved under the 2002 Plan that remained available for future stock awards upon the effectiveness of the IPO. Options granted under the 2002 Plan continue to be governed by the provisions of the 2002 Plan. On November 9, 2010, the Company registered an additional 1,000,000 shares for issuance under the 2004 Plan in accordance with the provisions of the 2004 Plan. The total number of shares which remain available for grant under the 2004 Plan is 1,595,950 shares at December 31, 2010. The options which are granted from the 2004 Plan are exercisable at various dates and will expire no more than ten years from their date of grant, or in the case of certain non-qualified options, ten years from the date of grant. The exercise price of each option shall be determined by the Board of Directors although generally options have an exercise price equal to the fair market value of the Company’s stock on the date of the option grant. In the case of incentive stock options, the exercise price shall not be less than 100% of the fair market value of the Company’s common stock at the time the option is granted. For holders of more than 10% of the Company’s total

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

combined voting power of all classes of stock, incentive stock options may not be granted at less than 110% of the fair market value of the Company's common stock at the date of grant and for a term not to exceed five years.

Upon the effectiveness of the initial public offering, the 2004 Non-Employee Directors' Stock Option Plan (the NEDSOP Plan) was adopted. On November 9, 2010, the Company registered an additional 216,071 shares for issuance under the NEDSOP Plan in accordance with the provisions of the NEDSOP Plan. The total number of shares which remain available for grant under the NEDSOP Plan is 465,333 shares at December 31, 2010. The options granted from the NEDSOP Plan are exercisable at various dates and will expire no more than ten years from their date of grant. The exercise price of each option shall be determined by the Board of Directors although generally options have an exercise price equal to the fair market value of the Company's stock on the date of the option grant.

In connection with the hiring of certain executive officers during 2006, the Compensation Committee of the Company's Board of Directors approved inducement grants of non-qualified stock options to purchase shares of Anadys' common stock. The total number of shares which remain outstanding under the inducement grants is 200,000 shares at December 31, 2010. These option awards were granted without stockholder approval pursuant to NASDAQ Marketplace Rule 4350(i)(1)(A)(iv). Although these options were granted outside the 2004 Plan, they are subject to substantially identical terms and conditions as those contained in the 2004 Plan.

The following table summarizes information about stock options outstanding under the 2002 Plan, 2004 Plan, the NEDSOP Plan and inducement grants as of December 31, 2010:

Range of Exercise Price	Options Outstanding			Options Exercisable	
	Number Outstanding	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$1.02-\$1.99	1,666,068	8.66	\$ 1.51	491,773	\$ 1.88
\$2.00-\$2.32	1,646,402	7.22	\$ 2.23	1,240,188	\$ 2.23
\$2.40-\$2.95	1,827,639	5.51	\$ 2.70	1,225,570	\$ 2.83
\$3.00-\$8.16	1,719,832	4.87	\$ 5.71	1,712,287	\$ 5.72
\$8.37-\$15.61	<u>160,525</u>	4.50	\$11.51	<u>160,525</u>	\$11.51
	<u>7,020,466</u>			<u>4,830,343</u>	

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

A summary of the Company's stock option activity and related information is as follows:

	Options Outstanding	Weighted Average Exercise Price	Weighted- Average Remaining Contractual Term	Aggregate Intrinsic Value (In thousands)
Balance at December 31, 2007	5,547,827	\$4.44		
Granted	1,508,493	2.07		
Exercised	(36,567)	2.90		
Cancelled	<u>(474,387)</u>	5.47		
Balance at December 31, 2008	6,545,366	\$3.83		
Granted	1,359,736	2.34		
Exercised	(84,465)	2.74		
Cancelled	<u>(660,626)</u>	4.34		
Balance at December 31, 2009	7,160,011	\$3.57		
Granted	889,188	1.22		
Exercised	(21,619)	2.16		
Cancelled	<u>(1,007,114)</u>	<u>3.77</u>		
Balance at December 31, 2010	<u>7,020,466</u>	<u>\$3.25</u>	<u>6.48</u>	<u>\$345</u>
Exercisable at December 31, 2010	<u>4,830,343</u>	<u>\$3.89</u>	<u>5.40</u>	<u>\$ —</u>

The total intrinsic value of options exercised determined as of the date of exercise was \$0.01 million and \$0.2 million for the years ended December 31, 2010 and 2009, respectively. There was no material intrinsic value for options exercised during the year ended December 31, 2008. The Company settles employee stock option exercises with newly issued common shares.

Excluding stock option grants to non-employee directors, the Company did not grant any stock options to non-employees for the year ended December 31, 2010 and 2008. The Company granted 15,000 stock options to non-employees for the year ended December 31, 2009. Compensation expense related to non-employee stock option grants was \$0.02 million, \$0.1 million and \$0.01 million for the years ended December 31, 2010, 2009 and 2008, respectively.

Share-Based Compensation

The Company is required to record share-based compensation as components of either research and development expense or general and administrative expense. The

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Company has reported the following amounts of share-based compensation expense in the consolidated Statements of Operations (in thousands, except per share data):

	For the Year Ended December 31,		
	2010	2009	2008
Research and development expense	\$ 725	\$1,354	\$1,271
General and administrative expense	1,054	1,361	1,492
Total share-based compensation expense	<u>\$1,779</u>	<u>\$2,715</u>	<u>\$2,763</u>
Net share-based compensation expense, per common share basic and diluted	<u>\$ 0.04</u>	<u>\$ 0.08</u>	<u>\$ 0.10</u>

Included in the research and development expense and general and administrative expense for the year ended December 31, 2009 is \$0.3 million and \$0.1 million, respectively, of share-based compensation expense related to the modification of stock options for employees included in the June 2009 reduction in workforce.

As of December 31, 2010, there was an additional \$2.0 million of total unrecognized compensation cost related to unvested share-based awards granted under the Company's stock option plans. This unrecognized compensation cost is expected to be recognized over a weighted-average period of 2.48 years.

The fair value of options granted to employees and non-employee directors was estimated at the date of grant using a Black-Scholes pricing model with the weighted-average assumptions stated below.

	For the Year Ended December 31,		
	2010	2009	2008
Risk-free interest rate	2.16%	2.20%	2.45%
Dividend yield	0.00%	0.00%	0.00%
Volatility factors of the expected market price of the Company's common stock	84.68%	80.14%	71.43%
Weighted-average expected life of option (years)	6.31	5.94	5.76

The estimated weighted-average fair value of stock options granted during 2010, 2009 and 2008 was \$0.89, \$1.62 and \$1.31, respectively.

Dividend Yield — The Company has never declared or paid dividends on common stock and has no plans to do so in the foreseeable future.

Expected Volatility — Volatility is a measure of the amount by which a financial variable such as a share price has fluctuated or is expected to fluctuate during a period. The Company considered the historical volatility from its IPO through the dates of grants, in combination with the historical volatility of peer companies and business

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

and economic considerations in order to estimate the expected volatility, due to the Company's short history as a public company.

Risk-Free Interest Rate — This is the U.S. Treasury rate for the week of each option grant during the quarter having a term that most closely resembles the expected life of the option.

Expected Life of the Option Term — This is the period of time that the options granted are expected to remain unexercised. Options granted during the year have a maximum contractual term of ten years. The Company estimates the expected life of the option term based on actual past behavior for similar options with further consideration given to the class of employees to whom the options were granted.

Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The Company assesses the forfeiture rate on an annual basis and revises the rate when deemed necessary.

Employee Stock Purchase Plan

Under the Company's 2004 Employee Stock Purchase Plan (Purchase Plan), employees may purchase common stock every six months (up to but not exceeding 12% of each employee's wages) over the offering period at 85% of the fair market value of the common stock at certain specified dates. The offering period may not exceed 24 months. This purchase discount is significant enough to be considered compensatory. The Company did not record any share-based compensation related to the Purchase Plan for the year ended December 31, 2010 as our current year expense was offset by the reversal of prior year expense associated with employee withdrawals from the Purchase Plan during the year ended December 31, 2010. The Company recorded \$0.1 million and \$0.2 million in share-based compensation related to the Purchase Plan for the years ended December 31, 2009 and 2008, respectively.

For the years ended December 31, 2010, 2009 and 2008, 74,804 shares, 82,729 shares and 83,248 shares of common stock were issued under the Purchase Plan, respectively. The weighted-average fair value of employee stock Purchase Plan purchases was \$1.48, \$1.85 and \$1.84 per share for 2010, 2009 and 2008, respectively.

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Shares Reserved for Issuance

Shares of common stock reserved for future issuance as of December 31, 2010 are as follows:

	<u>December 31, 2010</u>
Warrants	2,944,234
Employee Stock Purchase Plan	966,250
Stock options under the Company's Plans:	
Granted and outstanding	7,020,466
Reserved for future issuance	<u>2,061,283</u>
	<u>9,081,749</u>

11. Income Taxes

Significant components of the Company's deferred tax assets as of December 31, 2010 and 2009 are shown below. A valuation allowance of \$35.4 million and \$32.4 million has been established to offset the deferred tax assets, as realization of such assets has not met the more likely than not threshold, as of December 31, 2010 and 2009, respectively (in thousands).

	<u>As of December 31,</u>	
	<u>2010</u>	<u>2009</u>
Deferred tax assets:		
Non-qualified stock options	\$ 4,309	\$ 4,914
Capitalized research and development expense	30,815	27,415
Accruals	275	98
Other	<u>35</u>	<u>33</u>
Total deferred tax assets	35,434	32,460
Valuation allowance for deferred tax assets . . .	<u>(35,434)</u>	<u>(32,445)</u>
Net deferred taxes	—	15
Deferred tax liabilities:		
Unrealized loss on securities available-for-sale	<u>—</u>	<u>(15)</u>
Total deferred tax liabilities	<u>—</u>	<u>(15)</u>
Net deferred taxes	<u>\$ —</u>	<u>\$ —</u>

Subject to the potential limitations discussed below, as of December 31, 2010 the Company had generated federal and state tax net operating loss (NOL) carryforwards

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

of approximately \$137.2 million and \$116.8 million, respectively. Approximately \$4.2 million of the federal loss carryforwards will begin expiring in 2011 and state loss carryforwards will begin expiring in 2017, unless previously utilized. Also, as of December 31, 2010, the Company had generated federal and state research tax credit (R&D credit) carryforwards of approximately \$2.6 million and \$5.1 million, respectively. Approximately \$0.1 million of the federal research credits will begin expiring in 2011 unless previously utilized. The state research credits currently do not expire.

The future utilization of the Company's NOL and R&D credit carryforwards to offset future taxable income may be subject to an annual limitation, pursuant to Internal Revenue Code Sections 382 and 383, as a result of ownership changes (as defined in Internal Revenue Code Sections 382 and 383) that have occurred previously and/or that could occur in the future. The Company has initiated an analysis of Section 382 and, based on this preliminary analysis, the Company believes that sufficient changes of ownership have occurred such that NOL and R&D credit carryforwards and other deferred tax assets will be subject to annual limitations in future periods. The Company has not completed its Section 382 analysis and as such the Company has removed the deferred tax assets for NOL and R&D credit carryforwards from its deferred tax asset schedule and has recorded a corresponding decrease to its valuation allowance. When this analysis is finalized, the Company plans to update its unrecognized tax benefits. Due to the existence of the valuation allowance, future changes to the Company's unrecognized tax benefits will not impact the Company's effective tax rate.

The provision for income taxes on earnings subject to income taxes differs from the statutory federal rate at December 31, 2010, 2009 and 2008, due to the following (in thousands):

	<u>As of December 31,</u>		
	<u>2010</u>	<u>2009</u>	<u>2008</u>
Federal income taxes at 35%	\$(5,724)	\$ (9,547)	\$(11,341)
State income taxes, net of federal benefit	(849)	(1,566)	(1,748)
Tax effect on non-deductible expenses and credits	(320)	(978)	(1,233)
Warrants	(706)	42	18
Expiration of net operating loss carryforwards . . .	1,424	1,426	703
Stock based compensation	1,139	(44)	647
Removal of net operating losses and R&D credits	2,060	58,547	—
Change in valuation allowance	2,976	(48,080)	12,940
Other	—	200	14
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

ANADYS PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

As of December 31, 2010 and 2009, the Company has not recorded any uncertain tax benefits.

The Company's practice is to recognize interest and/or penalties related to income tax matters in income tax expense. As of December 31, 2010, the Company did not record any interest or penalties.

The tax years 1994 to 2010 remain open to examination by the major taxing jurisdictions to which the Company is subject, as tax authorities may have the right to examine prior periods where net operating losses or tax credits were generated and carried forward.

12. Savings Plan

The Company has a retirement savings plan for all employees, subject to certain age requirements, pursuant to Section 401(k) of the Internal Revenue Code. The Company matches 25% of employee contributions up to 6% of eligible compensation. Employer contributions were \$0.1 million for each of the years ended December 31, 2010, 2009 and 2008.

13. Unaudited Quarterly Results of Operations

The following unaudited quarterly financial data, in the opinion of management, reflects all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of results for the periods presented.

<u>Fiscal Year 2010</u>	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
	(In thousands, except net loss per share)			
Revenues	\$ —	\$ —	\$ —	\$ —
Net loss	(6,203)	(2,977)	(4,743)	(2,426)
Net loss per share, basic and diluted	(0.17)	(0.08)	(0.11)	(0.04)
<u>Fiscal Year 2009</u>	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
	(In thousands, except net loss per share)			
Revenues	\$ —	\$ —	\$ —	\$ —
Net loss	(8,759)	(6,530)	(7,732)	(4,257)
Net loss per share, basic and diluted	(0.30)	(0.21)	(0.21)	(0.11)

[THIS PAGE INTENTIONALLY LEFT BLANK]

Executive Officers

Steve Worland, Ph.D.

President & Chief Executive Officer

James L. Freddo, M.D.

Senior Vice President, Drug Development
& Chief Medical Officer

Kevin L. Eastwood

Senior Vice President, Corporate Development

James Appleman, Ph.D.

Senior Vice President, Research
& Chief Scientific Officer

Elizabeth E. Reed, J.D.

Senior Vice President, Legal Affairs,
General Counsel & Secretary

Peter T. Slover, C.P.A.

Vice President, Finance & Operations

Board of Directors

Stelios Papadopoulos, Ph.D. (Chairman)

Former Vice-Chairman
Cowen & Co., LLC

Mark G. Foletta

Senior Vice President, Finance
& Chief Financial Officer
Amylin Pharmaceuticals, Inc.

Marios Fotiadis

Global Director
TVM Capital, Inc.

James L. Freddo, M.D.

Senior Vice President, Drug Development
& Chief Medical Officer
Anadys Pharmaceuticals, Inc.

Barry A. Labinger

Executive Vice President
& Chief Commercial Officer
Human Genome Sciences, Inc.

Steve Worland, Ph.D.

President & Chief Executive Officer
Anadys Pharmaceuticals, Inc.

Kleanthis G. Xanthopoulos, Ph.D.

President & Chief Executive Officer
Regulus Therapeutics Inc.

Corporate Counsel

Cooley LLP

San Diego, CA

Independent Auditors

Ernst & Young LLP

San Diego, CA

Transfer Agent & Registrar

Computershare Shareholder Services

250 Royall Street
Canton, MA 02021
(781) 575-2879

Corporate Headquarters

5871 Oberlin Drive, Suite 200
San Diego, CA 92121
(858) 530-3600
www.anadyspharma.com

Investor Relations

(858) 530-3600
(858) 527-1540 (fax)

Common Stock

Anadys Pharmaceuticals, Inc. common stock
trades on the NASDAQ Global Market
under the symbol ANDS.

Annual Meeting

Friday, May 27, 2011
9:00 a.m. Pacific Daylight Time
Holiday Inn
9888 Mira Mesa Boulevard
San Diego, CA 92131

Important Note About Forward-Looking Statements.

Except for historical information, this Annual Report contains forward-looking statements that involve risks and uncertainties which may cause actual results to differ materially from the statements made. These forward-looking statements represent the judgment of Anadys as of the date of the printing of this Annual Report. Forward-looking statements include, but are not limited to, references to Anadys' beliefs and expectations regarding ANA598's position and utility in the HCV development landscape, future HCV treatment possibilities and the anticipated future clinical benefits of ANA598 and ANA773. For more detailed information on the risks and uncertainties associated with these forward-looking statements and the Company's other activities, see the "Risk Factors" section of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2010 that accompanies this Annual Report. Anadys does not undertake any obligations to update any forward-looking statements contained in this document as a result of new information, future events or otherwise.

ANADYS
PHARMACEUTICALS, INC.





ANADYS PHARMACEUTICALS, INC.

5871 OBERLIN DRIVE, SUITE 200
SAN DIEGO, CA 92121

P. 858.530.3600

F. 858.527.1540

WWW.ANADYSPHARMA.COM